John Williams'
Shadow Government Statistics
Analysis Behind and Beyond Government Economic Reporting

SPECIAL COMMENTARY NUMBER 968-B

U.S. Economic Reality, Second-Quarter GDP, Second-Cut Comprehensive GDP Revisions

September 6, 2018

Statistical Deception Bloats Headline U.S. Economic Growth

"Pollyanna Creep" Has Added 18.1% to Nominal Gross Domestic Product Since 1980

Second-Quarter Real GDP Growth Rose to 4.23% from 2.22% in First Quarter, While "GDP Equivalent" Gross Domestic Income Sank to 1.81% from 3.90%

Official Second-Quarter Real GDP Stood 17.5% Above Its 2007 Pre-Recession Peak, Yet It Held Shy by 5.2% (-5.2%) of Recovering that Peak, When Corrected for the Deliberate Understatement of GDP Inflation

Underlying Economic Reality Reflects Activity That Is Off Bottom, but Well Shy of Headline Expansion, in Fragile Mixed-Growth Stability as Confirmed by Better-Quality Broad Economic Measures

Yet, Private Labor Market Surveying, the Real Merchandise Trade Deficit and Real Construction Spending All Faltered in the Latest Reporting

Federal Reserve Policies Threaten Any Nascent Economic Recovery, as Systemic- and Consumer-Liquidity Conditions Tighten Meaningfully

GDP Benchmarking Pivoted on the Fourth-Quarter 2007 Business-Cycle Peak; Prior Activity Shifted Lower; Subsequent Activity Shifted Increasingly Higher

Benchmarking Showed the Headline Economic Collapse into 2009 to be Shallower, the Headline Recovery and Expansion to be Somewhat Faster and Stronger, Along with Follow-Through Distortions Inflating the Latest Headline GDP Growth

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PLEASE NOTE: This *Special Commentary* provides an overview of issues with and distortions in the headline reporting of the U.S. Gross Domestic Product (GDP), encompassing:

1) An extended assessment of the second estimate of Second-Quarter 2018 Gross Domestic Product, published on August 29th (see *Flash Commentary No. 968-Advance*).

2) An updated review of economic reality, underlying current U.S. economic conditions and the outlook for the quarter and year ahead.

3) An extended review of the July 27th Comprehensive GDP Benchmark Revision back to 1929, encompassing, updating and extending material covered in *Commentary No. 962*, up to and including the second estimate of second-quarter GDP.

Looking ahead: *Commentary No. 969* tomorrow, Friday, September 7th, will review initial coverage of the August Employment and Unemployment numbers, The Conference Board Help-Wanted Online Advertising® (see pages 6 and 7), the July 2018 Trade Deficit (pages 5 and 6) and Construction Spending (see pages 5 and 33).

Links to the most-recent *Watches: Hyperinflation Watch – No. 3* (August 12th), *Consumer Liquidity Watch – No. 4* (August 10th). Updated *Watches* should follow early next week.

NEW FEATURE: ShadowStats now publishes a brief *Daily Update* on headline economic reporting, when released. As major economic numbers are published, abbreviated summary highlights generally will follow in the top left hand-column (under the *Latest Commentaries* heading) of the www.ShadowStats.com home page, usually within an hour of the release (as can be seen there today with the July Trade Deficit and Construction Spending).

Planned publication schedules, revisions to same and notes to subscribers also are posted there regularly.

Best wishes to all — John Williams (707) 763-5786

Today's (September 6th) ***Opening Comments*** provide a broad overview U.S. economic reporting trends and underlying economic reality, net of GDP-related hype and exaggerated performance measures.

The ***Reporting Detail*** reviews in three parts, (1) the first-revision to second-quarter GDP, (2) underlying U.S. economic reality and (3) expanded coverage of the Comprehensive GDP Benchmark Revision back to 1929.

The ***Week, Month and Year Ahead*** previews tomorrow's (September 7th) release of August 2018 Employment and Unemployment.

Special Commentary No. 968 contents, including graphs and tables, are indexed and linked on following page.

Contents – Special Commentary No. 968-B Major Sections and Graphs

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OPENING COMMENTS

Underlying Economic Reality and Statistical Deception

Headline GDP Activity Bloated by Understated Official Inflation and "Pollyanna Creep"

Although Off Bottom, the Latest Numbers Face Renewed Economic Peril

Late-Breaking Numbers Suggest Intensifying, Near-Term Downside Pressures on U.S. Economic Activity, Despite a Nascent Recovery. These *Opening Comments* first touch upon recent headline economic releases covering July 2018 Real Construction Spending, the Real Merchandise Trade Deficit and the August 2018 Conference Board Help Wanted OnLine® advertising, all of which will be reviewed in some detail in the *Commentary No. 969*.

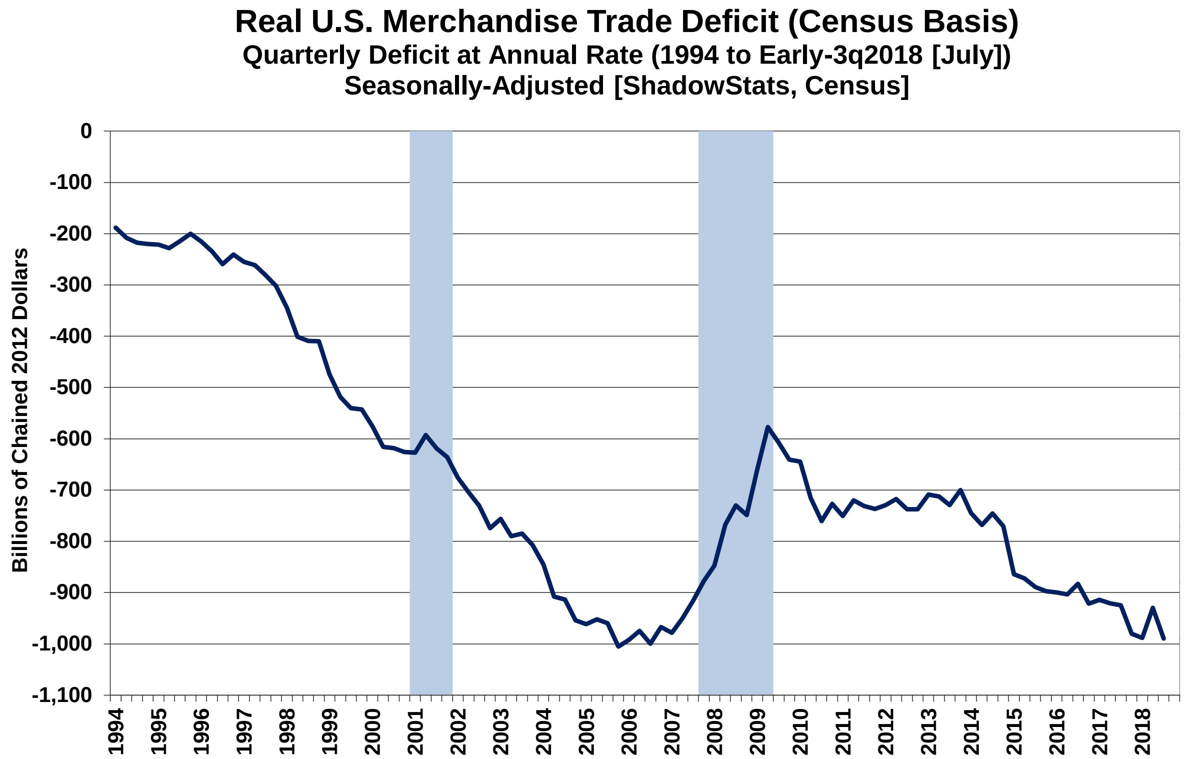
Separate discussion and analysis then follow of the heavily upside-biased, official reporting of Headline Real Gross Domestic Product (GDP) versus Alternate Real GDP measures, which reflect the removal of some of those reporting biases. The Headline and Alternate GDP measures also are compared and contrasted in *Section II* of the *Reporting Detail*, against a number of independent, good-quality measures of broad economic activity.

Near-Term Headline Economic Reporting Appears to Have Taken a Negative Turn. Providing a cautionary note to the apparent, nascent recovery in real-world economic activity discussed in the next section, headline July and August economic reporting in the last several days broadly has turned negative.

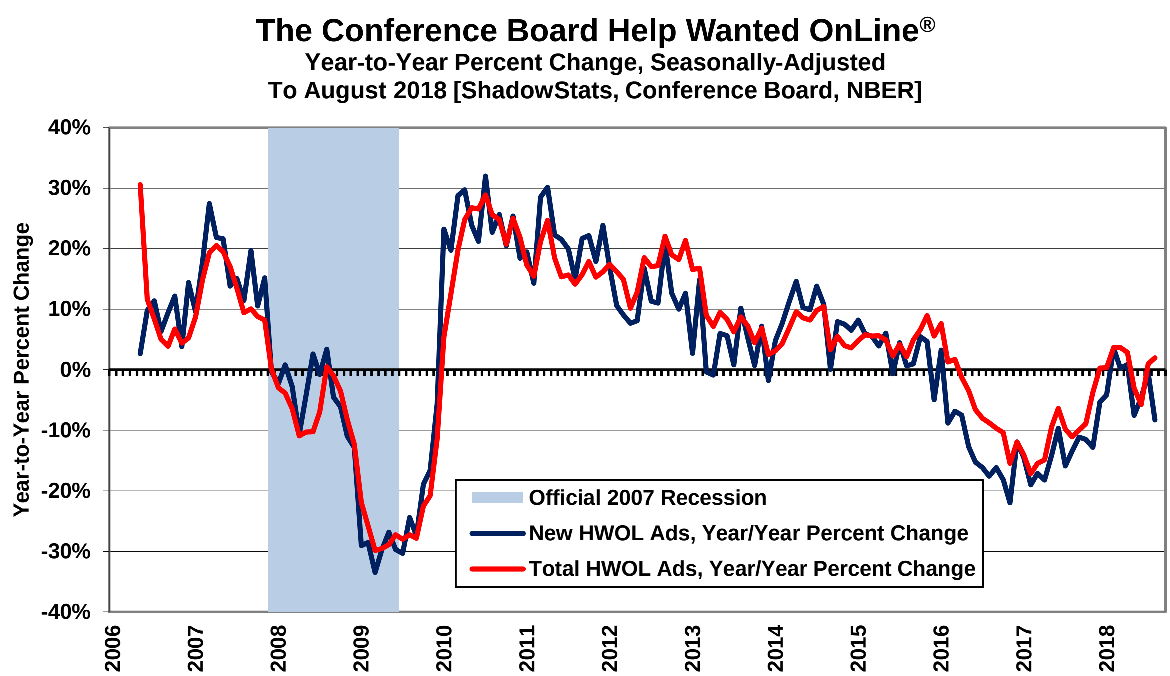
July 2018 Real Construction Spending tumbled month-to-month and slowed year-to-year, on top of downside revisions. Such tended to confirm a renewed slowdown in residential construction. Detail was released on September 4th by the Department of Commerce (see the discussions in *Section I*, *Graphs 22* and *23* in *Section II* and *Commentary No. 966* and *Commentary No. 967* for background on the most-recent Housing Starts and Home Sales numbers).

The July 2018 Real Merchandise Trade Deficit exploded, more than fully reversing the "narrowing" trend that so heavily boosted second-quarter GDP. The early third-quarter Real Merchandise Trade Deficit now is on track for its worst quarterly showing since third-quarter 2006. Implications are sharply negative for third-quarter GDP and the U.S. dollar (see *Graph OC-1*). Details were published by the Bureau of Economic Analysis, Department of Commerce on Wednesday, September 5th.

Graph OC-1: Real U.S. Merchandise Trade Deficit (1994 -2018), Early Third-Quarter 2018



Graph OC-2: The Conference Board Help Wanted OnLine®, Year-to-Year Percent Change (2006 to July 2018)



The Conference Board Help-Wanted Online Advertising® (HWOL) for August 2018 declined month-to-month by 1.0% (-1.0%), having gained 3.8% in July, but it rose year-to-year by 2.0% in August 2018, versus 1.0% in June 2018. Still, the all-important New Ads component in August continued in month-to-month and year-to-year contraction, down monthly by 8.2% (-8.2%) and 0.5% (-0.5%) in August and July, down year-to-year by 8.3% (-8.3%) and 0.6% (-0.6%) in August 2018 and July 2018 (see *Graph OC-2*). Against the November 2015 series peaks, August 2018 "Total Ads" were down 19.6% (-19.6%), with "New Ads" down 36.2% (-36.2%), deep in non-expansion territory (see *Commentary No. 964-A* for extended background), details were published Wednesday, September 5th, and the series will be updated fully in *Commentary No. 969*. Many thanks to the Conference Board for permission plot *Graph OC-2*. See also the discussion with *Graph OC-8*.

Real World U.S. Economy Appears to Have Turned Positive, on Balance, Albeit Well Shy of Expansion, With Nascent Recovery Threatened by a Fed Still Unwinding Its 2008 Banking Crisis. Broad economic activity in the United States usually expands and contracts on a regular basis, in cycles that traditionally follow an upside trend around long-term growth and expansion. That said, the last couple of decades have been unusually difficult for the United States. Exacerbated by lax if not negligent regulatory oversight, ongoing systemic excesses and instabilities climaxed in 2007, generating a financial-system panic and economic plunge of magnitudes and durations not seen since the early-1930s and the Great Depression. The U.S. Federal Reserve and the U.S. government moved at all costs to save the U.S. banking system and major corporations from formal collapse. Those costs, however, included what otherwise might have been more-meaningful economic stimulus for Main Street, U.S.A.

Current Real GDP Up by 22.3% or by 2.1% from Its Recession Trough? Looking at the inflation-adjusted Headline Real U.S. Gross Domestic Product (GDP) reflected in *Graph OC-3*, the official story is that economy crashed by 4.0% (-4.0%) [down by 4.2% (-4.2%) pre-benchmarking] from fourth-quarter 2007 into a second-quarter 2009 trough. The GDP grew thereafter until it recovered its pre-recession peak in second-quarter 2011, and then expanded beyond its prior-peak activity by 17.5% into second-quarter 2018, up by 22.3% from its recession trough. No other major economic series or employment number comes close to reflecting that magnitude of recovery and expansion.

Yet, an Alternate Real GDP case for those same benchmarked numbers, adjusted for common-experience inflation numbers, with multiple near-term tops coming into fourth-quarter 2007, crashed 7.0% (-7.0%) into third-quarter 2009, bottom-bouncing into a somewhat deeper trough in first-quarter 2014, with erratic ups and downs thereafter. Activity began moving consistently higher both quarter-to-quarter and year-to-year in second-quarter 2017, now 2.1% off its recession trough as of second-quarter 2018 GDP, but still shy by 5.2% (-5.2%) of recovering its pre-recession interim peak of fourth-quarter 2007.

Clarifying traditional business-cycle terms and definitions, once an economic measure such as inflation-adjusted GDP hits peak activity, its decline from that "Peak" traditionally is "Recession" until it hits a "Trough." Growth off the "Trough" is "Recovery" until it recovers its pre-recession peak. Growth beyond that prior "Peak" is "Expansion." Discussed and plotted in *Section II: UNDERLYING ECONOMIC REALITY*, a number of broad economic measures that are of better-quality than the heavily massaged and gimmicked GDP series, suggest that the Alternate Real GDP is closer to reality and more in line with common economic experience than the Headline Real GDP. Consider, too, that common experience—actual pocketbook issues—tends to be reflected in election results at the polling booth.

Underlying Economic Reality Still Drives Elections. Changes to economic reporting in recent decades, included the artificial reduction of headline inflation measures with the use of features such as "geometric weighting." That masked much of the recent headline weakness in the economy. Understated inflation used in deflating headline economic data, overstates the resulting inflation-adjusted real growth. Accordingly, the average person did not experience the heavily publicized, ongoing strong headline economic recovery and gains post-2009, with the result that disaffected voters overthrew conventional political wisdom and elected Donald Trump as U.S. President in the 2016 election. Repeated here from the January 8, 2017 *No. 859 Special Commentary*, see also *Commentary No. 846* of November 11, 2016:

> ***An Unusual Presidential Election Highlighted Underlying, Weaker-than-Headline Economic Activity.*** Most commonly, actual pocketbook issues—not media hype—drive elections, and the 2016 U.S. presidential race was a classic example of Main Street, U.S.A. not being fooled by artificially boosted economic reporting. Most people have a good sense of how they are doing personally, how their business conditions and local economy are faring. Noted in last year's year-end *Commentary No. 777* of December 30, 2015:
>
>> Once again, current circumstances are sharply negative for personal finances (see the *Consumer Conditions—Liquidity Issues Plague the Electorate* [*No. 777*]). Donald Trump's success in early polling for the Republican nomination likely reflects the disgruntlement with the economy, among other factors. Mr. Trump looks like he could take the nomination, assuming he can get through the political machinery of the Republican convention. If nominated, background economic conditions suggest that Main Street, U.S.A. would put him in the White House.
>
> Since the first availability of reasonably consistent data in 1930, in every U.S. presidential race since 1932 (held in years divisible by four), the incumbent party has lost the White House when annual growth in inflation-adjusted real annual disposable personal income (DPI) was below 3.10%. With the pre-election 2016 economy showing real DPI well below that threshold, the Democrats lost the White House, with Republicans also retaining control of Congress (see *Commentary No. 846*, *Commentary No. 841* and *Commentary No. 839*).
>
> Noted in the *Economist* of November 12, 2016, as to the poor-quality of public-opinion polling, versus the generally "surprising" election results:
>
>> There is one family of forecasts that did better: those which ignore both polls and candidates and predict results based exclusively on structural factors like economic performance and incumbency. This approach suggested all along that the 2016 campaign was likely to be an extremely tight race. Yet because these models seemed unsophisticated, and because Mr Trump's campaign was so unusual, they were largely overlooked.
>
> The element missed in that assessment—aside from a continuing sharp decline in the quality of many public-opinion polls—was that Mr. Trump recognized that the economy was weaker than reported by the government and that the average American was suffering financial pain. Trump campaigned with that theme and parlayed the underlying reality into winning the White House. Main Street, U.S.A. rarely is fooled by heavily gimmicked, overly positive economic data. Discussed in *Commentary No. 846*:
>
>> Every time DPI growth has been below 3.10% [since 1932], the incumbent party has lost (six elections). In every election where the DPI has been above 3.10%, the incumbent party has won (fourteen elections), except for two elections, in 1952 when Eisenhower beat Stevenson (DPI = 3.46%), and in 1992 when Clinton beat Bush (DPI = 4.28%). That 1992 number, though, was in the circumstance of rigged data.
>
> Indeed, the GDP and related National Income numbers were boosted artificially coming into 1992, by an external manipulation of the Bureau of Economic Analysis (BEA) and its GDP data, orchestrated by a senior Bush Administration official. The public usually has a good sense of underlying economic reality, irrespective of hyped, official numbers, to wit the Republicans still lost the White House in 1992, with Governor Clinton defeating President Bush.

GDP Benchmark Reporting Boosted by New Upside Biases in Methodological Revisions, and by Continued Overstatement of Real GDP Due to Understatement of Headline GDP Inflation. Every five years or so, the Bureau of Economic Analysis (BEA) publishes a Comprehensive Benchmark Revision to the Gross Domestic Product (GDP) and its related series, back to the earliest, consistent historical estimates of 1929. The 2018 comprehensive benchmark received a "First-Cut" review by ShadowStats in *Commentary No. 962* of July 27th, incorporated here by reference and as expanded upon in today's "Second-Cut" in these *Opening Comments* and in the *Reporting Detail - Section III: COMPREHENSIVE GDP BENCHMARK REVISIONS* beginning on page 35.

The related headline series here today are Gross Domestic Income (GDI) and Gross National Product (GNP). Up until 1991, the headline series was the Gross National Product, where the Gross Domestic Product (a variation on the earlier Gross Domestic Purchases, was a subsidiary series of the GNP, net of trade flows, and net of trade flows in factor income such as interest and dividend payments going forward). The switch was inspired by a broadly and generally deteriorating U.S. Balance of Payments, which tended to depress headline U.S. economic growth. With some rejiggering of accounts, the GDP became the headline series going forward.

Reporting and Inflation Methodology Changes Over Time Generally Have Favored Upside Revisions to Headline GDP Growth, Both Real (Inflation Adjusted) and Nominal (Not Adjusted for Inflation). Among a number of other issues, inflation-adjusted "real" GDP growth is biased heavily to the upside in official government reporting, through the deliberate use of understated inflation in deflating the nominal GDP activity (using too low an inflation rate in deflating economic growth results in an overstatement of the real headline growth). Changes made to inflation-estimation methodology so as to reduce the level of reported headline inflation, were introduced during the various Bush and Clinton administrations. The lowered inflation reporting boosted growth for the inflation-adjusted economic statistics, particularly the GDP, as touted, for example, in the 1999 *Economic Report of the President* (see the extended discussion in the *Public Commentary on Inflation Measurement*).

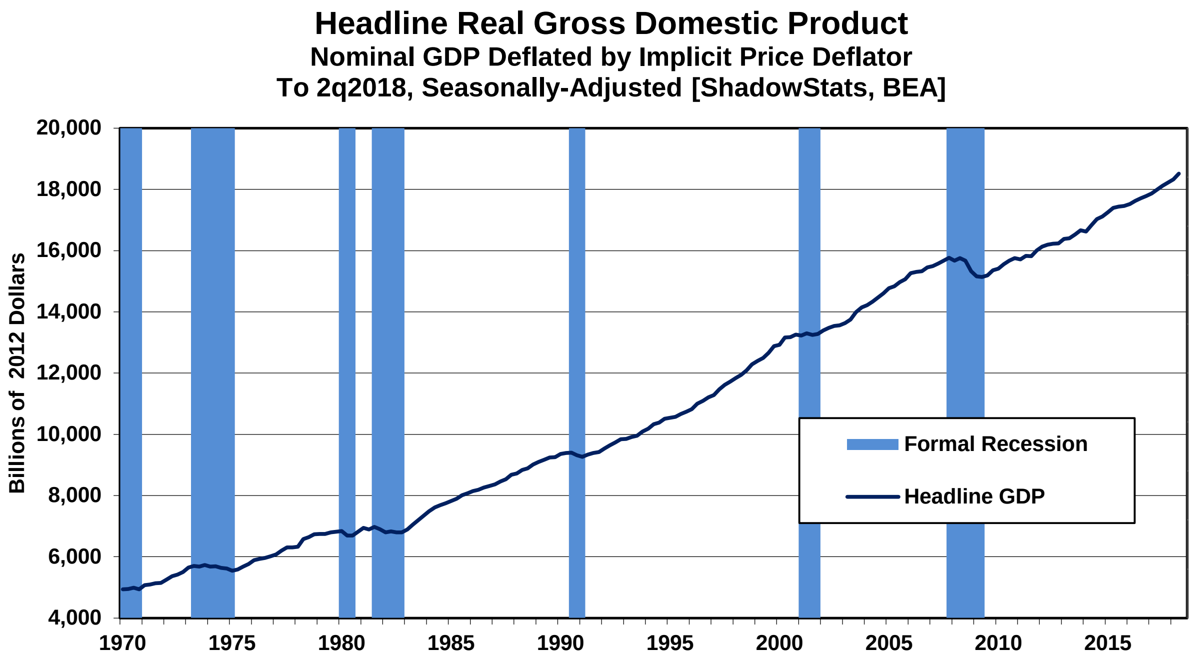
The cumulative effect of the inflation machinations is an understated annual inflation differential of about two percent for the headline GDP series, slightly widened in the recent comprehensive benchmark revisions. That updated differential is reflected in the plots of the "headline" versus "corrected" GDP measures used in comparison with a number of better-quality public and private economic measures in *Reporting Detail*, *Section II: UNDERLYING ECONOMIC REALITY*. Seen there, the "corrected" GDP numbers tend to move much more closely with underlying economic reality, than do the headline numbers.

The impact of GDP adjusted to "correct" for inflation distortions is reflected here in *Graph OC-4* versus *Graph OC-3*. *Graph OC-3* plots the headline GDP and formal recessions, while *Graph OC-4* plots the ShadowStats versions of same "Corrected" for the use of understated inflation used by the BEA in estimating its headline inflation-adjusted GDP levels. The graphs here show a longer history than the parallel *Graphs 9* versus *Graph 8* used in *Section II* (see also prior versions of similar comparisons such as found in *Commentary No. 957*).

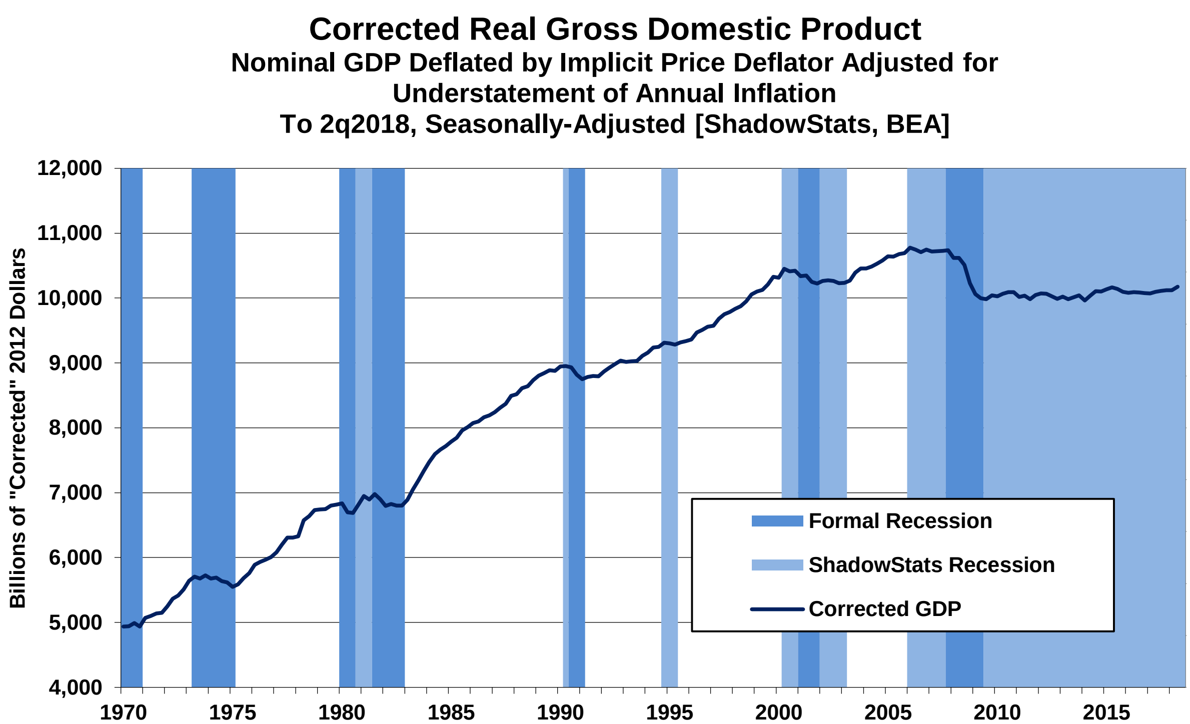
[Graphs OC-3 to OC-6 of the "Headline and "Corrected" GDP Levels and Annual Change follow on pages 10 and 11.]

[Discussion on definitional changes to GDP reporting methodologies and the related ShadowStats "Alternate" GDP Table OC-1 and Graphs OC-7 to OC-8 begin on page 11.]

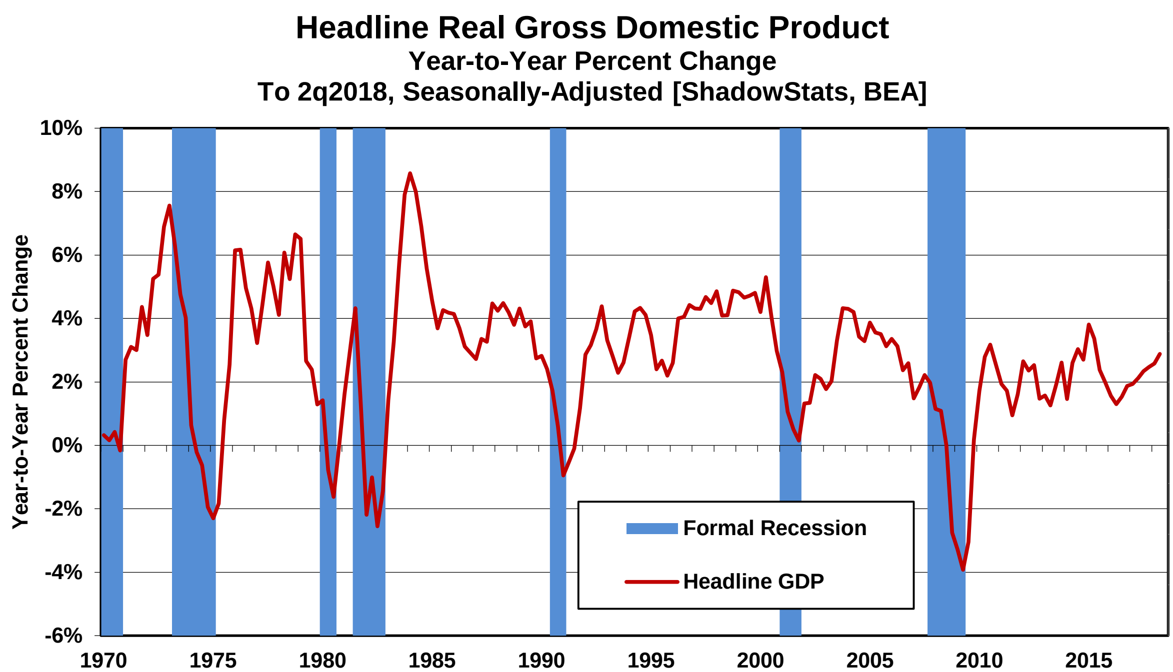
Graph OC-3: Real GDP (1970 -2018), Second-Estimate of Second-Quarter 2018



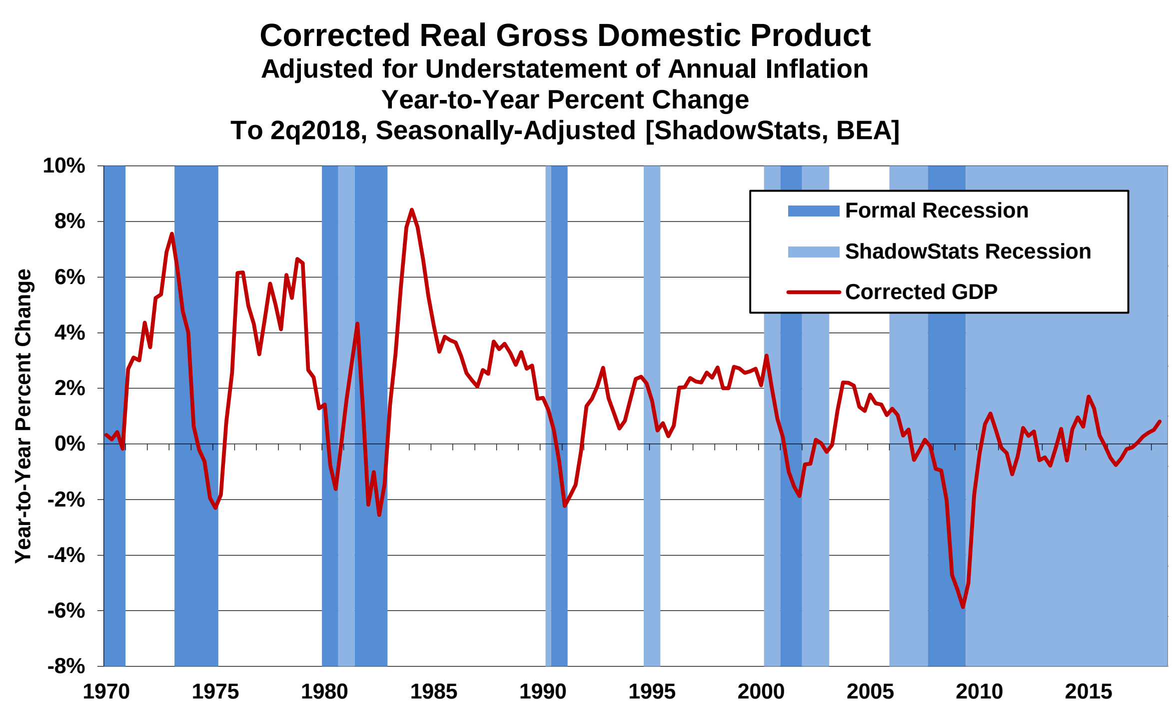
Graph OC-4: "Corrected" Real GDP (1970 -2018), Second-Estimate of Second-Quarter 2018



Graph OC-5: Quarterly GDP Real Year-to-Year Change (2000 to 2018), Second-Estimate of Second-Quarter 2018



Graph OC-6: Corrected-GDP, Year-to-Year Percent Change (2000 to Second-Quarter 2018)



Definitional Changes to Reporting Methodologies and the ShadowStats Alternate GDP. Separate from historical alterations to (understatement of) estimates of GDP inflation, also known as the Implicit Price Deflator (IPD), which artificially have boosted the headline Real GDP levels and growth rates in recent years, headline GDP growth also has been bloated artificially by changes to methodologies used in reporting nominal GDP. As with the inflation redefinitions, the methodological redefinitions almost always have been in the direction of boosting reported headline growth the revamped history and headline detail going forward, on both a nominal, as well as a real basis.

The inflation issue discussed in the prior section, has been addressed with the calculation and plot of the ShadowStats "Corrected" Real Gross Domestic Product (GDP), which is the Nominal GDP deflated by the IPD corrected for the understatement of headline inflation.

The combination of the inflation and methodological-reporting distortions has been addressed with the calculation and plotting of the ShadowStats "Alternate" GDP measure. The impact on nominal GDP growth from redefinitions to reporting methodology, which had the primary purpose and effect of boosting current and previously reported economic growth, is reflected in *Table OC-1*. That issue combined with inflation has been adjusted in *Graph OC-7*, with some supporting confirmation in *Graph OC-8*. *Table OC-1* reflects the nominal levels—not adjusted for inflation—as reported for a given year, along with the levels to which it was revised in later benchmarked reportings.

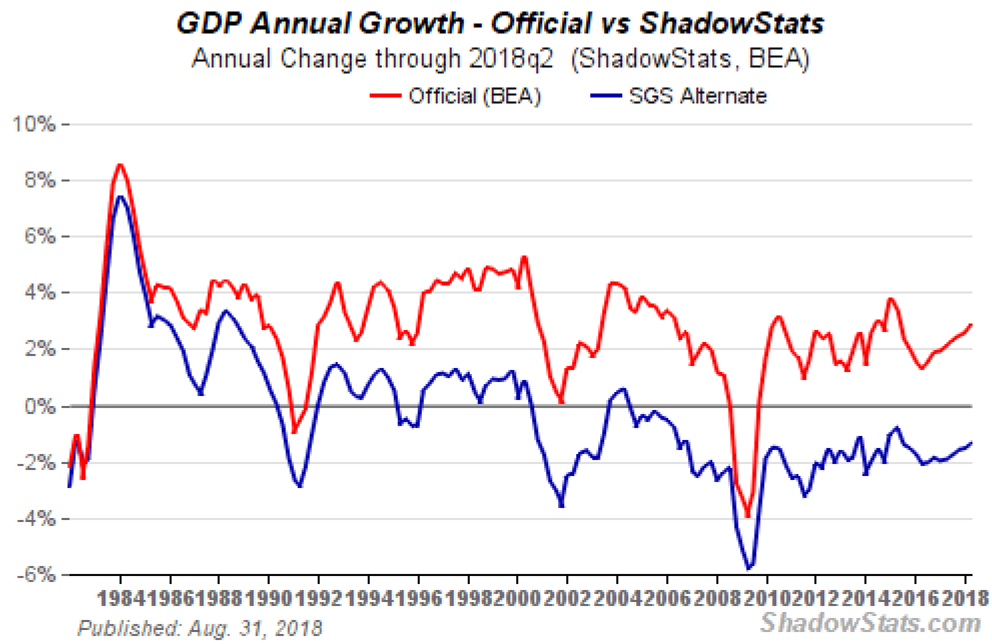
Consider that the changes here are not in the inflation calculation, since the numbers are before inflation adjustment, but in how methodology was redefined for compiling or adjusting the series over time. Most commonly, the effect seen was of growth and/or level of activity in the redefined series being revised higher, a pattern I defined as "Pollyanna Creep" back in 2004. Where the level of activity in the system is redefined and reset with each comprehensive benchmarking, the aggregative definitional changes are cumulative on a multiplicative basis. Against the early reporting of the GDP in 1980, "Pollyanna Creep" has added 18.1% to the level of annual, nominal Gross Domestic Product.

Table OC-1: Cumulative Impact of Methodology Changes to GDP Level Since 1980— "Pollyanna Creep"

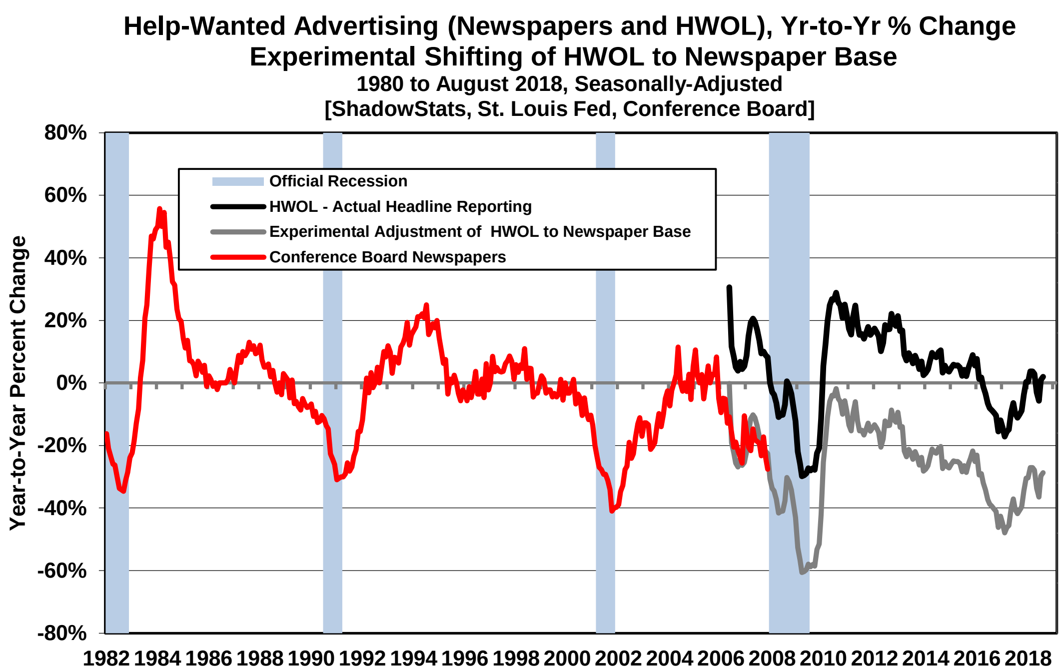
Pollyanna Creep--GDP Comprehensive Revisions
Have a Tendency to Increase Levels of Previously Estimated Historical Growth
As Positive Assumptions/Changes Are Built into Latest Reporting Methodologies
(GDP Expressed in Billions of Current Dollars)

GDP for	(1) Reported in 1984	(2) Reported In 1992	(3) Reported In 2004	(4) Reported In 2010	(5) Reported in 2018	Years Compared	Period Change	Cumulative Revision Since 1980
1980	2,586.40	2,708.00	2,789.50	2,862.5	2,857.31	(2)/(1)	4.70%	4.70%
1990	n.a.	5,513.80	5,803.10	5,979.6	5,963.14	(3)/(2)	5.25%	10.20%
2000	n.a.	n.a.	9,817.00	10,289.7	10,252.35	(4)/(3)	4.82%	15.50%
2010	n.a.	n.a.	n.a.	14,660.4	14,992.05	(5)/(4)	2.26%	18.11%
Total Cumulative (Multiplicative) Methodological Revisions Since 1980								18.11%
Sources: ShadowStats.com, Bureau of Economic Analysis (BEA)								

Graph OC-7: Real Year-to-Year GDP (1983 - 2018), Corrected for "Pollyanna Creep"



Graph OC-8: Experimental Plot of Help-Wanted Advertising Annual Change (1982 to July 3018)



ShadowStats Alternate GDP. The plot of the ShadowStats-Alternate GDP in *Graph OC-7* reflects the second estimate of second-quarter 2018 GDP, as defined in the *Notes on GDP-Related Nomenclature and Definitions* in *Section I: SECOND-QUARTER 2018 GDP, INITIAL GDI AND GNP*, with second-quarter headline detail reviewed there on page 24. Adjusted for understated inflation and other methodological changes—such as the inclusion of intellectual property, software and recent accounting for the largely not-measurable and still-questionable impact of the Affordable Care Act (ACA)—the business collapse that began in 2006/2007 broadly has been ongoing; there has been no meaningful economic rebound, as discussed in the following *Underlying Economic Reality Section II*, although adjusted just for the underreporting of headline inflation, the series does appear to be off bottom and growing.

The "corrected" real GDP *Graphs OC-4* these *Opening Comments* and *Graph 9* in *Section II* (see also the *Economy* section in *Special Commentary No. 935* and *2014 Hyperinflation Report—Great Economic Tumble*), are based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of official annual GDP inflation by roughly two-percentage points. It is separate from the nominal "Pollyanna Creep" issues addressed here, but the two issues effectively are combined in the ShadowStats-Alternate GDP in *Graph OC-7*, and as highlighted in the Alternate Data tab on the GDP on the www.ShadowStats.com home page.

Broadly supportive of the pattern of year-to-year change in Alternate Real GDP seen in *Graph OC-7*, is an experimental plot of historical year-to-year change in Help-Wanted Advertising and Conference Board Help Wanted OnLine® (HWOL) advertising, as published and discussed previously in the *Opening Comments* of *Commentary No. 964-A*. The experimental plot is mine, not that of the Conference Board. The new concept of online help-wanted advertising measured by the Conference Board showed a nearly identical pattern to that of overlapping newspaper-based Help-Wanted Advertising, I just fit the HWOL into the prior series, again, as discussed in *Commentary No. 964-A*.

[REPORTING DETAIL, Section I:
SECOND-QUARTER 2018 GDP, INITIAL GDI AND GDP
follows on the next page.]

REPORTING DETAIL

Section I: SECOND-QUARTER 2018 GDP, INITIAL GDI AND GNP

Small Revisions, Unstable Reporting

Second-Quarter Gross Domestic Product Revised Minimally Higher, In Sharp Contrast with the Theoretically Equivalent GDI. [*Portions of this section are repetitive from coverage of the first-revision to second-quarter 2018 GDP and initial coverage of second-quarter GDI and GNP in Flash Commentary No. 968-Advance*.] Headline first revisions to Second-Quarter 2018 Gross Domestic Product (GDP) were relatively minimal, published along with the initial headline estimates of Second-Quarter 2018 Gross Domestic Income (GDI) and Gross National Product (GNP) by the Bureau of Economic Analysis (BEA) on August 29th. The latest details were in the context of the 2018 Comprehensive GDP Benchmark Revisions of July 27th (see *Section III* and *Commentary No. 962*). Only the initial estimate of second-quarter 2018 GDP coincided with the July 27th benchmarking. The initial estimates of the GDI and GNP, again, just were published with the first-revision to second-quarter 2018 GDP (see *Table 1*).

Gross Domestic Product (GDP). Second-quarter 2018 GDP annualized real growth revised higher to 4.23% [previously 4.06%] +/- 2.5% (95% confidence interval) in its second estimate. This headline first revision was slightly above expectations for a minimal downside revision, versus unrevised gains of 2.22% in first-quarter 2018 and 2.29% in fourth-quarter 2017 (see detail in *Table 1* and *Graphs 1* and *3*). *Table 1* highlights the second estimate of second-quarter 2018 GDP, versus its initial reporting coincident with the July 27th benchmarking, and the unrevised benchmarked estimates for first-quarter 2018 and fourth-quarter 2017, against their last pre-benchmark readings). Year-to-year real growth in second-quarter 2018 GDP was a revised 2.89% [previously 2.85%], versus 2.58% in first-quarter 2018 and 2.47% in fourth-quarter 2017 (see *Graphs 2* and *4*).

GDP inflation (the Implicit Price Deflator or IPD) for the second-quarter 2018 was revised negligibly, holding at 3.25% [previously 3.22%] quarter-to-quarter, versus 2.02% in first-quarter 2018 and 2.72% in fourth-quarter 2017 (see *Graph 7*).

Year-to-year inflation was negligibly revised to 2.48% [previously 2.47%], versus an unrevised 1.95% in first-quarter 2018 and 1.97% in fourth-quarter 2017 (see *Graph 7*).

Notes on GDP-Related Nomenclature and Definitions

For purposes of clarity and the use of simplified language in the text of the GDP analysis, here are definitions of several key terms used related to GDP reporting (denotes an exclusive ShadowStats series):*

***Gross Domestic Product (GDP)** is the headline number and the most widely followed broad measure of U.S. economic activity. It is published quarterly by the [Bureau of Economic Analysis](#) (BEA), with two successive monthly revisions, along with annual Benchmark Revisions usually in the following July, coincident with the "advance" GDP estimate for the second quarter of that year. Every five years or so, those annual revisions are "Comprehensive," restating the series back to its earliest 1929 estimate. The GDP popularly is reported and followed in real terms, net of inflation, reflecting annualized quarter-to-quarter or year-to-year change.*

****GDP Corrected for Headline Understatement of Inflation** is a ShadowStats version of real GDP that adjusts headline real GDP activity only for the understated inflation used in deflating the series. Where the inflation used to deflate the various GDP components series tends to be understated in aggregate by roughly two-percentage points per year, the resulting headline real GDP growth is overstated by roughly that amount (see the discussion in [Public Commentary on Inflation Measurement](#)* and the *Opening Comments Graphs OC-4 and OC-5).*

****ShadowStats Alternate GDP Estimate** is a ShadowStats version of real GDP, which adjusts the headline real GDP activity for nominal biases built into the headline GDP reporting from methodological redefinitions that usually are introduced with annual benchmark revisions. Discussed in the Opening Comments, these biases almost always are positive—the ShadowStats "Pollyanna Creep"—and have added 18.1% to the headline level of nominal GDP since 1980 (see Table OC-1). Since those numbers are nominal, before inflation-adjustment, the annual bias estimates are separate from the inflation-adjusted distortions of the previous "Corrected" series. Graph OC-7, however, is an inflation-adjusted, year-to-year version of this series, posted regularly on the Alternate Data Tab of [www.ShadowStats.com](#). It will be fully updated and overhauled in the near future.*

***Gross Domestic Income (GDI)** is the theoretical equivalent to the GDP, but the popular press generally does not follow it. Where GDP reflects the consumption side of the economy and GDI reflects the offsetting income side. When the series estimates do not equal each other—invariably the case—where the series are surveyed separately, the difference is added to or subtracted from the GDI as a "statistical discrepancy." Although the BEA touts the GDP as the more accurate measure, the GDI is relatively free of the of the GDP's monthly political targeting.*

***Gross National Product (GNP)** is the broadest measure of the U.S. economy published by the BEA. Once the headline number, now it rarely is followed by the popular media. GDP is the GNP net of trade in factor income (interest and dividend payments). GNP growth usually is weaker than GDP growth for net-debtor nations. Games played with headline money flows between the United States and the rest of the world tend to mute that impact on the reporting of U.S. GDP growth.*

***Real** (or **Constant Dollars**) means the data have been adjusted, or deflated, to reflect the effects of inflation.*

***Nominal** (or **Current Dollars**) means the growth or level of activity has not been adjusted for inflation. This is the way a business normally records revenues or an individual views day-to-day income and expenses.*

***GDP Implicit Price Deflator (IPD)** is the inflation measure used to convert GDP data from nominal to real. The adjusted numbers are based on "Chained 2012 Dollars," a concept introduced with the 2013 and comprehensive revisions, when 2009 was used as the base year for inflation (updated to 2012 dollar in 2018). "Chained" refers to a substitution methodology, where the GDP components with the strongest nominal growth, automatically get a weaker, deflating inflation rate, which artificially boosts the headline real GDP growth.*

***Quarterly** growth, unless otherwise stated, is in terms of seasonally-adjusted, annualized quarter-to-quarter growth, i.e., the growth rate of one quarter over the prior quarter, raised to the fourth power, a compounded annual rate of growth. While some might annualize a quarterly growth rate by multiplying it by four, the BEA uses the compounding method, raising the quarterly growth rate to the fourth power. So a one percent quarter-to-quarter growth rate annualizes to 1.01 x 1.01 x 1.01 x 1.01 = 1.0406 or 4.1%, instead of 4 x 1.0% = 4.0%.*

***Annual** growth is year-to-year change of the referenced period versus the same period the year before.*

The GDP (or the broader GNP detail headlined in earlier decades) remains the most worthless of the popular government economic series, in terms of determining what really is happening to U.S. business activity. The series is the most-heavily-modeled, politically-massaged and gimmicked government indicator of the economy. It has been so since at least the 1960s (see the discussions in today's *Opening Comments* and [Special Commentary No. 885](#)).

Table 1: Second Estimate of Second-Quarter 2018 GDP, Revised Growth Distribution versus Recent Quarters

Annualized Quarterly Real Growth in Headline Gross Domestic Product (GDP)
First Revision 2nd-Quarter 2018 GDP and July 27th Benchmark Revisions
Growth Contribution by Consumption and Product Sector

GDP COMPONENTS	2nd-Q 2018 Second Estimate	2nd-Q 2018 First Estimate	1st-Q 2018 Bench-Marked	1st-Q 2018 Original	4th-Q 2017 Bench-Marked	4th-Q 2017 Original
CONTRIBUTING ECONOMIC SECTOR						
Personal Consumption Expenditures						
- Goods	1.12%	1.24%	-0.13%	-0.09%	1.42%	1.67%
- Services	1.43%	1.46%	0.49%	0.69%	1.22%	1.08%
Gross Private Domestic Investment						
- Fixed Investment	1.07%	0.94%	1.34%	1.23%	1.04%	1.31%
- Change in Private Inventories	-0.97%	-1.00%	0.27%	-0.01%	-0.91%	-0.53%
Net Exports of Goods and Services	1.17%	1.06%	-0.02%	-0.04%	-0.89%	-1.16%
Government Consumption/Investment	0.41%	0.37%	0.27%	0.22%	0.41%	0.51%
GDP ANNUALIZED REAL GROWTH	4.23%	4.06%	2.22%	1.99%	2.29%	2.89%
Final Sales, GDP Less Inventories	5.20%	5.06%	1.95%	2.00%	3.20%	3.42%
CONTRIBUTING PRODUCT SECTOR						
Goods	2.05%	1.81%	1.20%	0.73%	0.34%	0.78%
Services	1.78%	1.85%	0.73%	0.82%	1.32%	1.18%
Structures	0.39%	0.39%	0.28%	0.44%	0.64%	0.93%
GDP Annualized Real Growth	4.23%	4.06%	2.22%	1.99%	2.29%	2.89%
SUPPLEMENTAL: GDI AND GNP						
Gross Domestic Income (GDI)	1.81%	--	3.90%	3.57%	1.49%	1.05%
Gross National Product (GNP)	4.07%	--	2.20%	1.91%	2.57%	2.71%
Sources: Bureau of Economic Analysis (BEA), ShadowStats.						

Headline Second Estimate of Second-Quarter 2018 GDP by Sector. Detailed in *Table 1*, the headline second estimate of Second-Quarter 2018 GDP revised to a somewhat faster, annualized real quarterly growth rate of 4.23% [previously 4.06%], up from the recently benchmarked growth rates of 2.22% in first-quarter 2018 [1.99% pre-benchmark], 2.29% [2.89% pre-benchmark] in fourth-quarter 2017, 2.82% [3.16% pre-benchmark] in third-quarter 2017, 2.99% [3.06% pre-benchmark] in second-quarter 2017 and 1.79% [pre-benchmark 1.24%] in first-quarter 2017 (see the *Seasonally Adjusting Seasonal Adjustments* entry in *Section III: SECOND-CUT COMPREHENSIVE GDP BENCHMARK REVISIONS*).

Table 1 shows the breakout of GDP growth by quarter, by economic sector and by general product sector. The second estimate of second-quarter GDP at a 4.23% annualized aggregate real quarterly growth rate was depressed by a decline in inventories that subtracted 0.97% from Final Sales. Indeed the real Final Sales number (GDP growth minus Inventory change) was at an incredibly high (as in not credible) 5.20%. Otherwise, the unusually strong GDP growth was distributed fairly evenly across the major categories.

Not shown in the table are the year-to-year real GDP growth rates, a revised 2.89% [previously 2.85%,] in second-quarter 2018, versus unrevised post-benchmark annual rates in first-quarter 2018 of 2.58% [pre-benchmark 2.77%], fourth-quarter 2017 of 2.47% [pre-benchmark 2.58%], in third-quarter 2017 of 2.34% [pre-benchmark 2.30%], in second-quarter 2017 of 2.11% [pre-benchmark 2.21%] and in first-quarter 2017 of 1.93% [pre-benchmark 2.00%].

The average real annualized-quarterly and annual GDP growth rates over the last forty years each revised a bit higher in the benchmarking through first-quarter 2018, from 2.71% to 2.73% quarterly, and from 2.70 % to 2.72% annually. Given the headline surge in quarterly second-quarter 2018 GDP, those forty-year averages just shifted to 2.75% quarterly and to 2.71% annually.

Consumer Sector Remained Heavily Stressed. *Table 1* shows the breakout of GDP growth by quarter, by economic sector and by general product sector. As noted in *Commentary No. 957* of July 1st, the pre-benchmarked final estimate of first-quarter 2018 showed consumer weakness "particularly in the negative contribution to the headline GDP growth rate of 0.09% (-0.09%) in the Goods Sector under Personal Consumption Expenditures, and negative growth contribution of 0.04% (-0.04%) from Residential Investment, a subcomponent of Fixed Investment in Gross Private Domestic Investment." While headline contribution to real GDP growth from the consumer goods sector turned positive, to 1.12% in the latest second-quarter detail, it remained down by 0.13% (-0.13%) in the benchmarked first-quarter 2018 detail.

Residential Investment (not detailed in *Table 1* but a component of "Fixed Investment"), however, remained a negative contributor to real second-quarter 2018 GDP growth of 0.06% (-0.06%) [previously 0.04% (-0.04%)], having been a benchmark-revised, negative-growth contributor to first-quarter 2018 of 0.14% (-0.14%). The weakness in the housing market remains an intensifying, near-term issue as discussed in *Commentary No. 966*, *Commentary No. 967* and as reflect to *Graphs 21* and *22 in Section II: UNDERLYING ECONOMIC REALITY*.

Real GDP Levels and Annual Growth Rates. *Graphs 1* and *3* plot headline levels of real quarterly GDP activity, respectively showing short-term (since 2000) and long-term (since the historical onset of the quarterly GDP series in 1947) perspectives. *Graph 2* and *4* show the revised year-to-year quarterly detail for the same series. Discussed in *Section III: SECOND-CUT COMPREHENSIVE GDP BENCHMARK REVISIONS*, headline benchmark revisions to annual real growth pivoted on the fourth-quarter 2007 pre-recession GDP peak. Growth before the peak revised lower, and after the peak it revised higher. Accordingly, the current-cycle trough in quarterly annual change remained at second-quarter 2009, but reflecting a revised year-to-year decline of 3.92% (-3.92%) [previously 4.09% (-4.09%)].

That was the deepest year-to-year contraction for any quarterly GDP in the history of the quarterly series, which began with first-quarter 1947 (1948 in terms of available year-to-year detail). Shown in *Graph 6*, the revised annual decline of 2.54% (-2.54%) [previously 2.78% (-2.78%] in 2009 remained the steepest regular annual drop in economic activity since the Great Depression. The 1946 production shutdown and economic reorganization following World War II, however, resulted in an annual GDP revised decline of 11.61% (-11.61%) [previously 11.58% (-11.58%)], still minimally narrower than the revised 1932 annual economic crash of 12.88% (-12.88%) [previously 12.89% (-12.89%)].

Graphs 5 and *6* show the levels of annual real GDP activity, as well as annual percent change, as estimated beginning in 1929. Reflected in *Graph 5*, the annual-average real GDP growth in 2017 eased back some to 2.22% [previously 2.27%], versus a revised 1.57% [previously 1.49%] in 2016, 2.88% [previously 2.86%] in 2015 and 2.45% [previously 2.57%] in 2014. The annual growth rate of 1.55% [previously 1.60%] in 2011, traded places with 2016 annual growth of 1.57% [previously 1.49%] as the slowest pace of annual growth in the post-2009 "recovery."

Gross National Product (GNP) and Gross Domestic Income (GDI). The first estimates of second-quarter 2018 GNP and GDI also were released on August 29th, lagging the parallel GDP reporting and related benchmark revisions by one month, as usual, due to a lack of available, significant underlying detail, a problem that remains common to the headline GDP detail, as well.

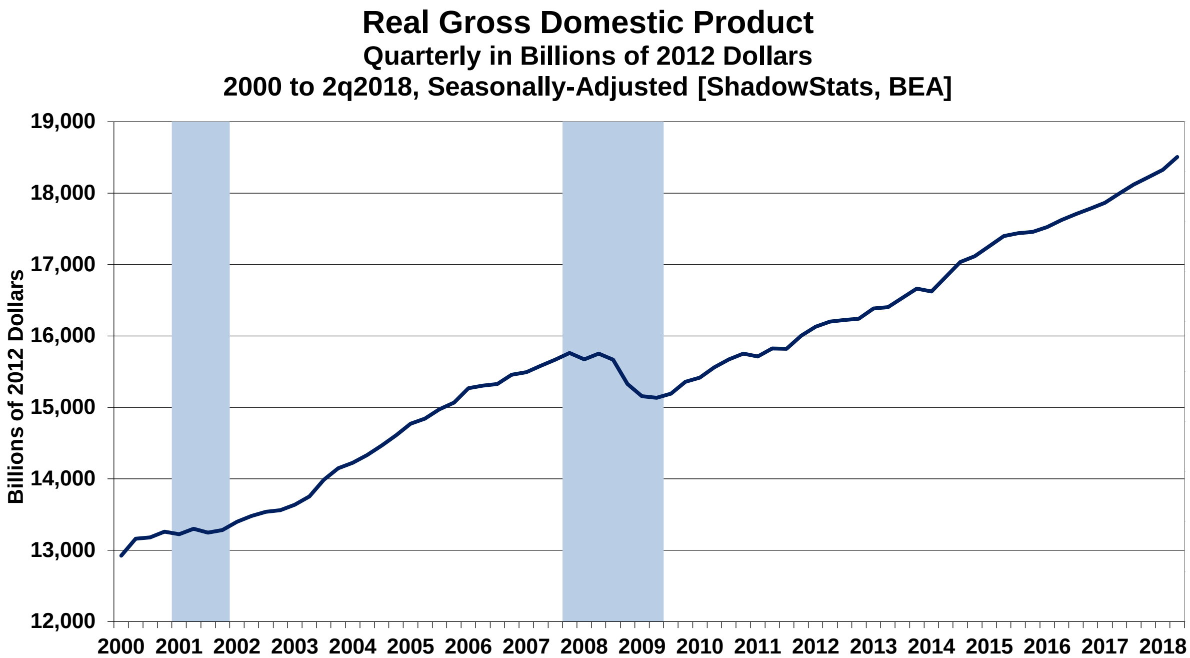
GNP is the broadest National Income measure, reflecting GDP plus the net international trade-flows of factor income, specifically interest and dividend payments. As a reporting gimmick aimed at boosting the headline reporting of economic growth for net-debtor nations such as the United States, international reporting standards were shifted some decades back to reporting headline GDP instead of what had become a relatively weaker GNP. With no unusually large swings in headline factor income, however, second-quarter 2018 GNP reporting moved largely along with the GDP. The initial estimate of second-quarter 2018 GNP showed annualized quarterly real growth of 4.07%, versus 2.20% in first-quarter 2018 and 2.57% in fourth-quarter 2017. Year-to-year growth rose to 3.10% in second-quarter 2018, versus 2.73% in first-quarter 2018 and 2.56% in fourth-quarter 2017.

GDI is the theoretical income-side equivalent to the consumption-side GDP estimate, yet the two measures rarely come close to showing similar quarterly growth patterns, with some relatively wild quarterly swings in the current numbers. Accordingly, on just a bookkeeping basis, the GDP and GDI are made to equal each other, every quarter, with the addition of an ever-fluctuating "statistical discrepancy" to the GDI-side of the equation. Yet, the headline GDI growth patterns reflect only the headline GDI estimate, not any "discrepancy" accounting.

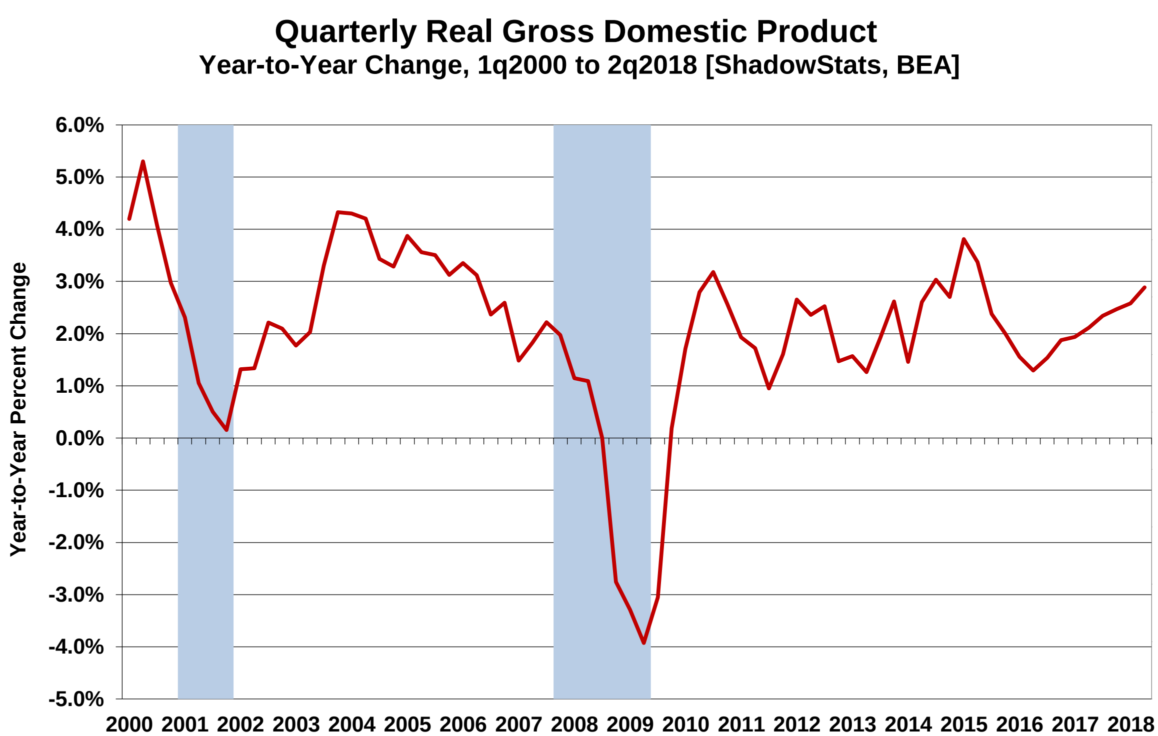
Accordingly, against the headline 4.23% second-quarter GDP growth, up from 2.22% in the first quarter 2018 and versus 2.29% in fourth-quarter 2017, second-quarter GDI grew at an annualized pace of 1.81%, down from a revised 3.90% [previously 3.89%] in first quarter 2018 and against 1.49% in fourth-quarter 2017 (see *Table 1*). Annual GDI growth rose by 2.12% in second-quarter 2018, versus a revised 2.36% [previously 2.33%] in first-quarter 2018 and 2.25% in fourth-quarter 2017.

Implicit Price Deflator (IPD). The IPD is the effective inflation rate used in deflating the before-inflation-adjustment or nominal GDP, to an after-inflation-adjustment, or real GDP basis. As general guidance, the weaker the inflation rate used in deflating an economic series, the stronger will be the resulting inflation-adjusted growth, and vice versa. (*Text continues on page 23.*)

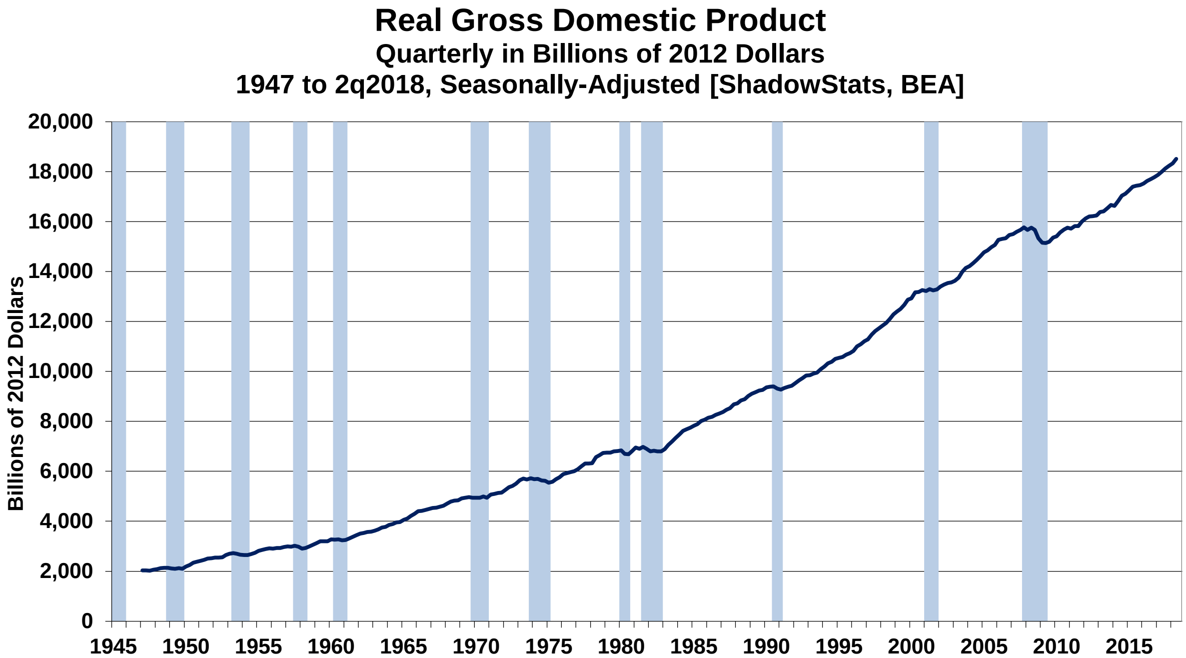
Graph 1: Quarterly GDP in Billions of 2012 Dollars (2000 to 2018), Second-Estimate of Second-Quarter 2018



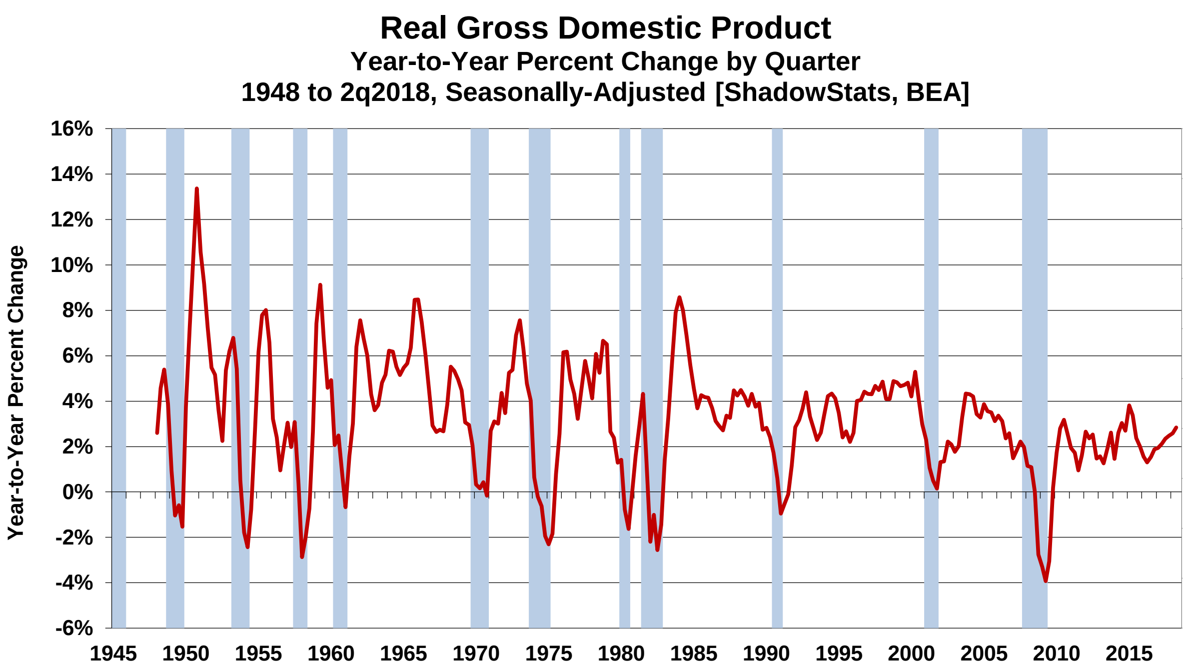
Graph 2: Quarterly GDP Real Year-to-Year Change (2000 to 2018), Second-Estimate of Second-Quarter 2018



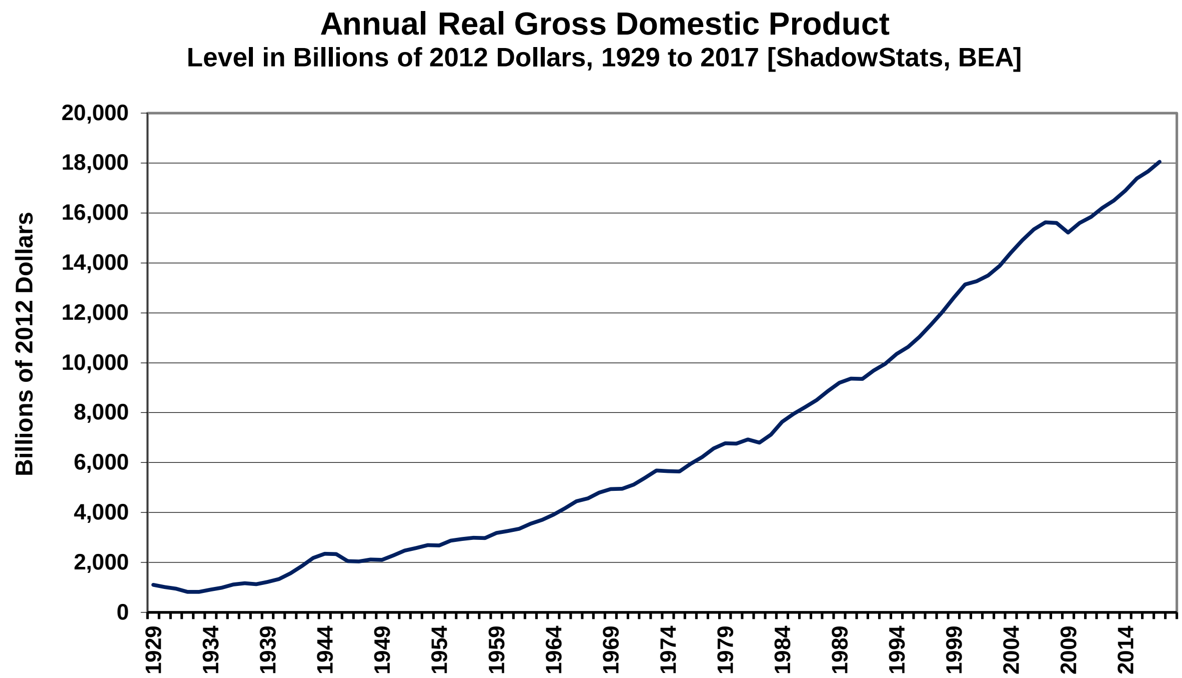
Graph 3: Quarterly GDP in Billions of 2012 Dollars (1947-2018), Second-Estimate of Second-Quarter 2018



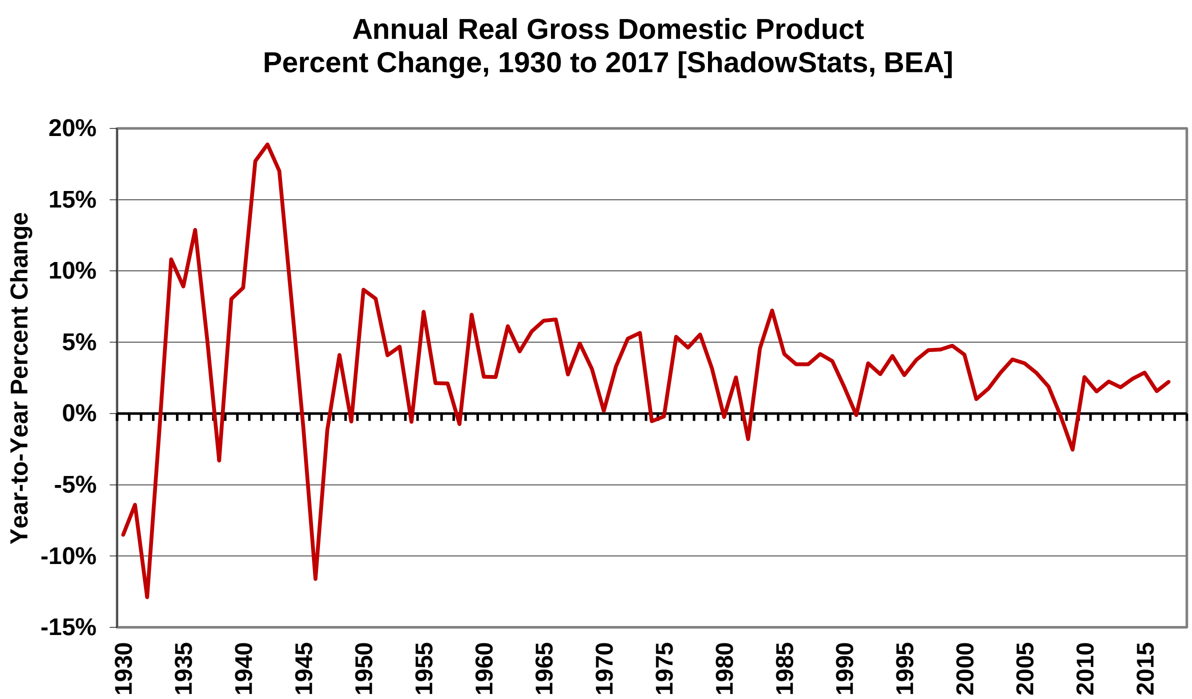
Graph 4: Year-to-Year GDP Real Change (1948-2018), Second-Estimate of Second-Quarter 2018



Graph 5: Annual GDP in Billions of 2012 Dollars (1929-2017)



Graph 6: Real Annual Percent Change (1930-2017)



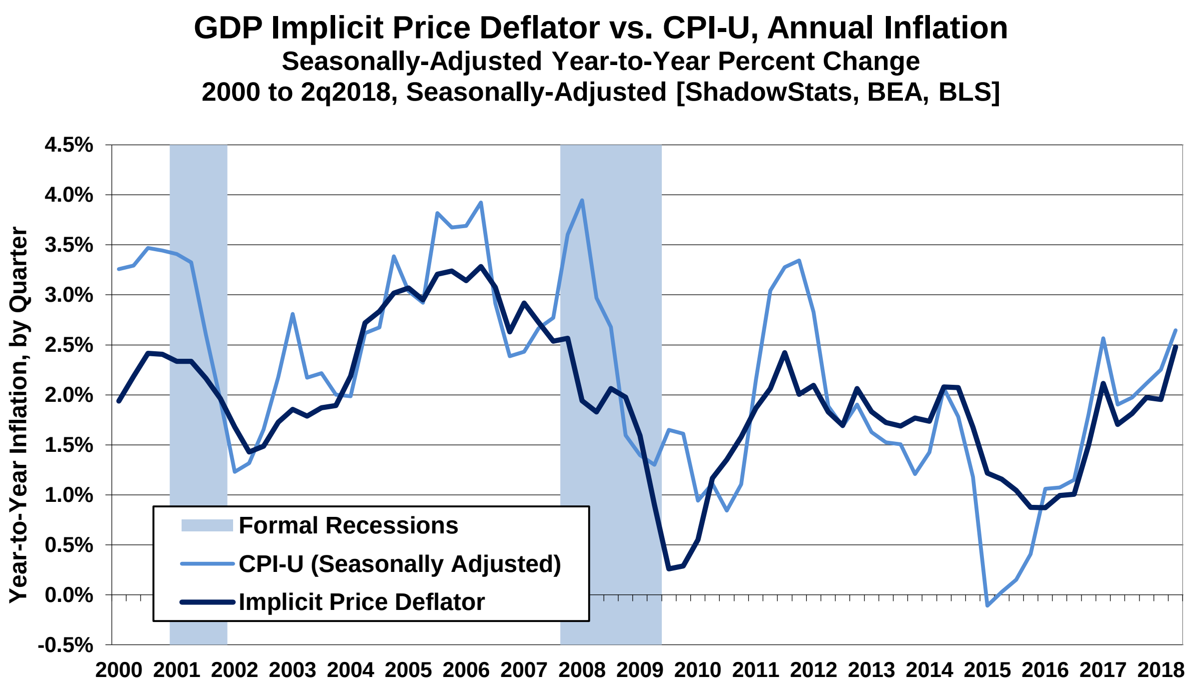
[*Continued from page 19.*] The seasonally-adjusted Implicit Price Deflator showed annualized quarterly inflation for the second estimate of second-quarter 2018 of 3.24%, versus 2.02% [2.20% pre-benchmark] in first-quarter 2018, having gained 2.72% [2.35% pre-benchmark] in fourth-quarter 2017, 1.94% [2.09% pre-benchmark] in third-quarter 2017, 1.14% [1.01% pre-benchmark] in second-quarter 2017, and 2.10% [2.00% pre-benchmark] in first-quarter 2017.

Year-to-year, the second estimate of second-quarter 2018 IPD was 2.48% [initially 2.47%], versus 1.95% [1.91% pre-benchmark] in first-quarter 2018, 1.97% [1.86% pre-benchmark] in fourth-quarter 2017, 1.81% [1.78% pre-benchmark] in third-quarter 2017, 1.70% [1.60% pre-benchmark] in second-quarter 2017, 2.11% [1.96% pre-benchmark] in first-quarter 2017 (see *Graph 7*).

For comparison, seasonally-adjusted, annualized quarterly CPI-U inflation, consistent with the way the seasonally-adjusted, headline real GDP is worked, showed annualized quarterly gains of 1.66% in second-quarter 2018, versus 3.50% in first-quarter 2018, 3.31% in fourth-quarter 2017, 2.13% in third-quarter 2017, 0.10% in second-quarter 2017 and 2.95% in first-quarter 2017.

Seasonally-adjusted, year-to-year quarterly CPI-U inflation, consistent with the way the seasonally-adjusted, headline real GDP is worked, showed annual gains of 2.65% in second-quarter 2018, versus 2.25% in first-quarter 2018, versus 2.12% in fourth-quarter 2017, 1.97% in third-quarter 2017, 1.90% in second-quarter 2017 and 2.57% in first-quarter 2017 (see *Graph 7*).

Graph 7: Year-to-Year Inflation, Implicit Price Deflator and CPI-U (2000-2018)



ShadowStats Alternate GDP. The ShadowStats-Alternate GDP (reviewed and discussed in today's *Opening Comments*) for the second estimate of second-quarter 2018 GDP, was an unrevised year-to-year decline of 1.3% (-1.3%), versus a revised annual GDP headline gain of 2.9% [previously 2.8%]. That was against a ShadowStats annual decline of 1.5% (-1.5%) and an annual, real headline GDP gain of 2.6% in fourth-quarter 2017.

While the annualized, real quarterly growth rate is not estimated formally on an alternate basis, the heavily bloated, overstated, second estimate of an annualized, headline quarter-to-quarter gain of 4.2% in second-quarter 2018 likely was much weaker in reality, net of all the happy assumptions and regular reporting gimmicks.

Irrespective of the headline benchmark revisions, real-world quarterly contractions still appear to have been a realistic possibility for bloated, headline inflation-adjusted GDP in most quarters since the official, second-quarter 2009 end to the 2007 recession.

Noted in the *Opening Comments, t*he "corrected" real GDP *Graphs OC-4* in the *Opening Comments* and *Graph 9* in *Section II* (see also the *Economy* section in *Special Commentary No. 935* and *2014 Hyperinflation Report—Great Economic Tumble*), are based on the removal of the impact of hedonic quality adjustments that have reduced the reporting of official annual GDP inflation by roughly two-percentage points. It is not the same measure as the ShadowStats-Alternate GDP, here, which reflects reversing additional methodological distortions ("Pollyanna Creep") of recent decades, discussed in the *Opening Comments* and highlighted in the Alternate Data tab on the GDP on the www.ShadowStats.com home page.

[Section II: UNDERLYING ECONOMIC REALITY begins on the next page.]

Section II: UNDERLYING ECONOMIC REALITY

Current Conditions, and Likely Near- and Long-Term Developments
Tentative and Fragile Early-Economic Recovery Vulnerable to Fed Tightening

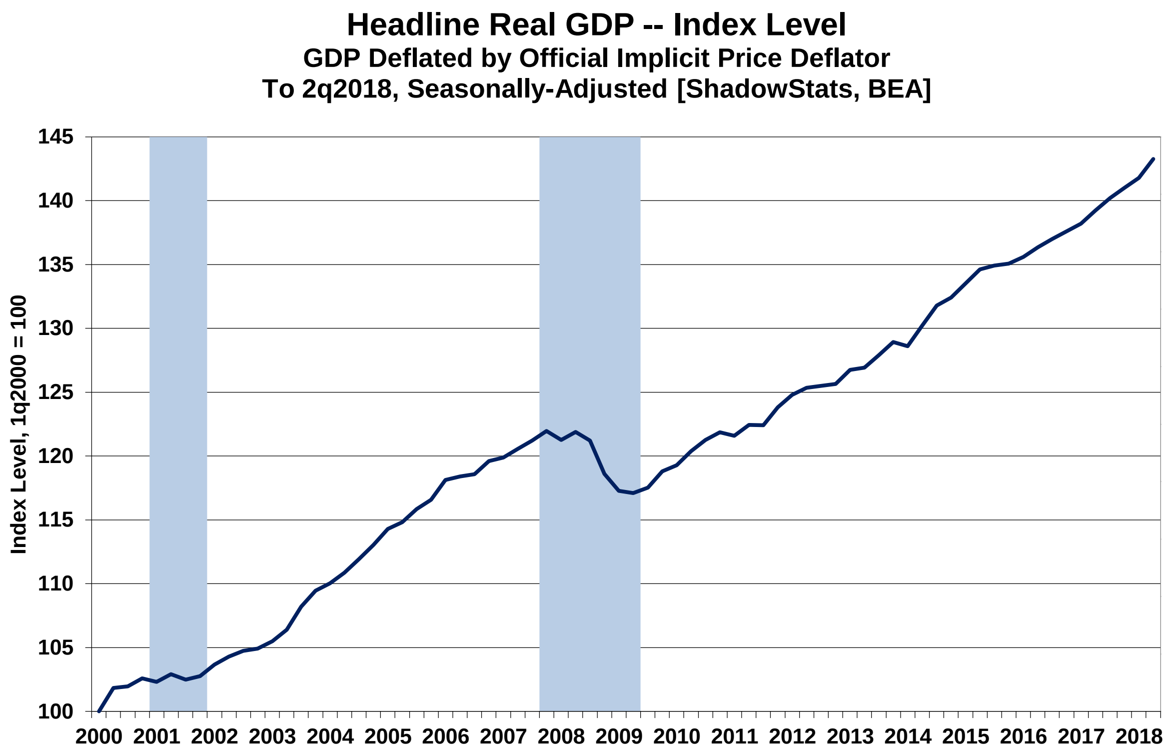
Unlike Booming Headline GDP, Real-World Business Activity Is Off Bottom, But Still Well Shy of Recovery and Economic Expansion. Noted regularly in the monthly GDP *Commentaries*, the headline GDP detail simply remains the most worthless of the popular government economic series, in terms of indicating realistic U.S. business activity. "Headline Real GDP" reflected in *Graphs 8 and 2[copy]*, and the same series corrected for understated inflation used in deflating the headline GDP, plotted in *Graphs 9* and *10* as "Corrected Real GDP" (see today's *Opening Comments*) are compared and contrasted here with a number of better-quality private and public economic numbers of broad activity, which tend to confirm the reporting patterns of "Corrected" *Graph 9*. Early recovery seen in the "Corrected" series remains extraordinarily fragile, with the Fed's current tightening of liquidity conditions threatening to pull the rug out from underneath a nascent rebound. Housing activity, for example, already has turned down anew.

A basic systemic issue is that the Federal Reserve remains mired in efforts to restore stable- and normal-functioning to the domestic banking, subsequent to the 2008 near-collapse of the banking system. Despite the Fed's continued tightening, which again is on the brink of pushing the economy back into broad contraction, there are no easy options available to stabilizing the circumstance, shy of an overhaul of the domestic banking system and its oversight by the Federal Reserve. If the domestic system falls back into another 2007/2008 liquidity panic, such a crisis very easily could trigger that systemic overhaul.

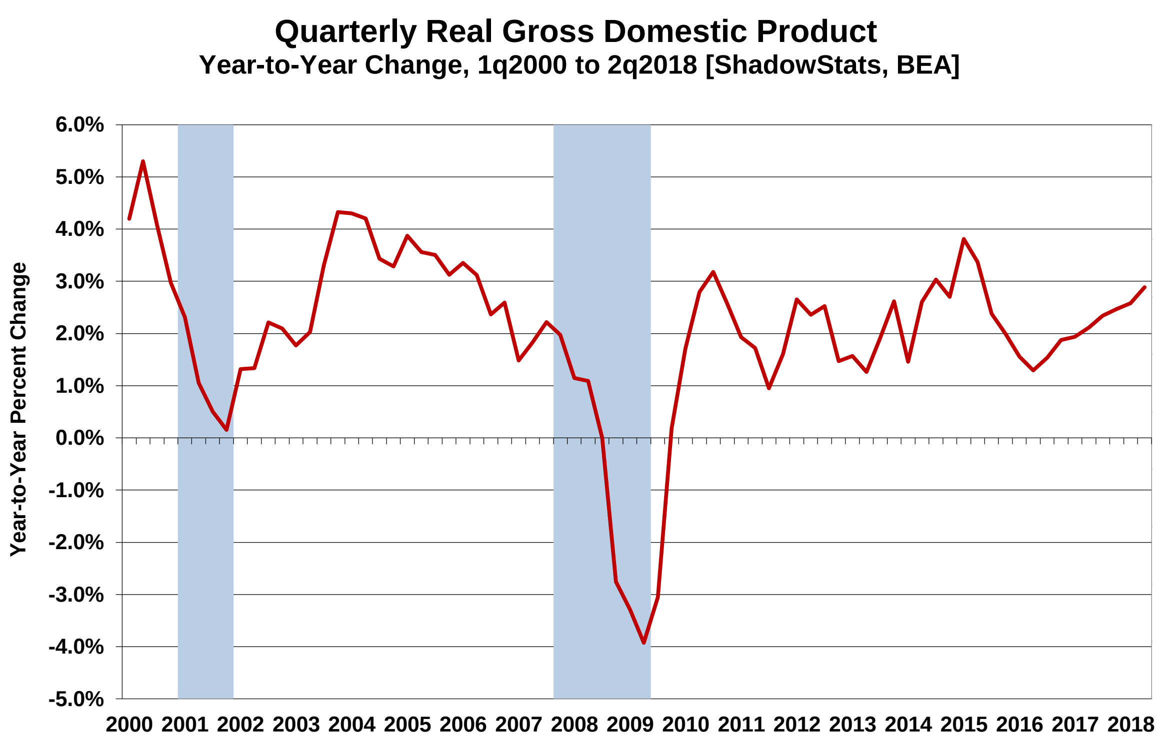
Freight Activity, Durable Goods Orders, Manufacturing, Consumer Goods, Petroleum Consumption, Construction Spending, Civilian Employment-Population Ratio All Are Shy of Pre-Recession Levels. Reviewed in today's *Opening Comments* the headline, inflation-adjusted estimates of U.S. GDP growth and level of activity, consistently have been overstated through the government's use of deliberately understated headline inflation in deflating economic series. At present, that inflation-rate differential for the GDP is running at about two-percentage points on an annual basis, slightly increased post-2018 benchmark revisions. *Graph 8* and the *Graph 2 [copied]* of second-quarter 2018 Headline Real GDP are adjusted for the headline Implicit Price Deflator (IPD) and are used as the Headline systemic standard measure, where *Graphs 9 and 10* are standard measure of the headline Corrected Real GDP.

Consider "Headline GDP" *Graphs 8* and *2[copy]*, versus *Graphs 9* and *10* of the "Corrected GDP." In terms of plotted level, Headline GDP plunges but recovered and expanded, while the "Corrected" GDP plunged and has yet to recover fully. In terms of year-to-year growth, the Headline Series shows annual growth about 2.0% higher, reflecting the headline inflation differential.

Graph 8: Real GDP Index – Headline Real GDP through Second-Estimate of Second-Quarter 2018
(Abbreviated Version of Graph OC-3 in the Opening Comments)



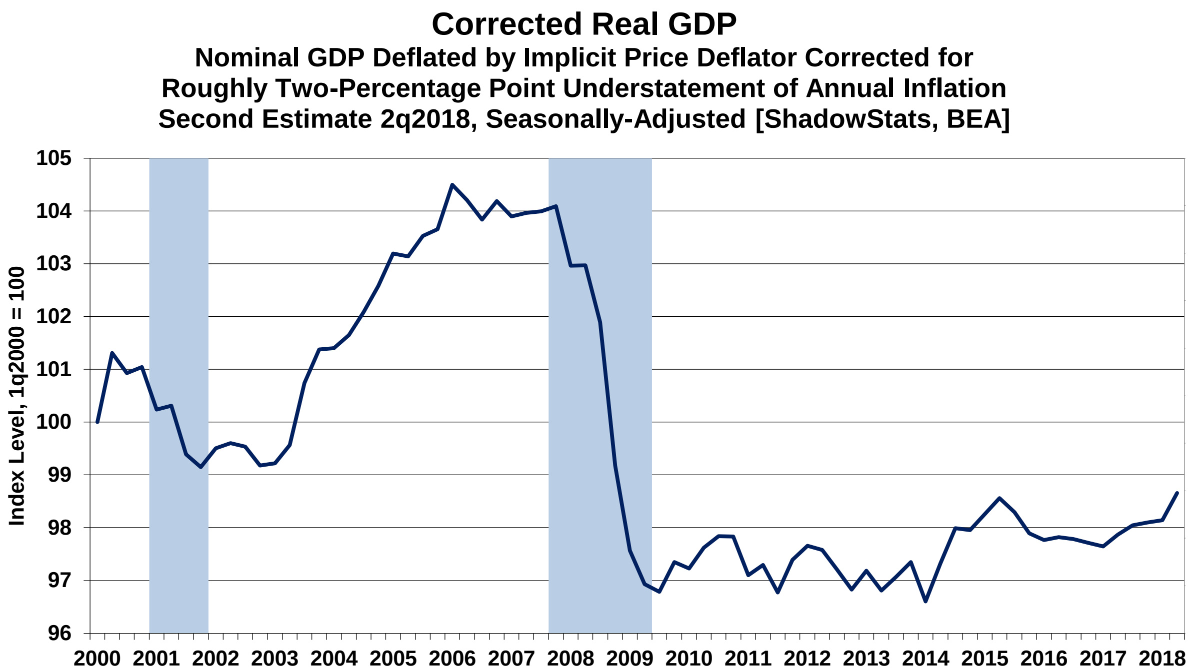
Graph 2[copy]: Quarterly GDP Real Year-to-Year Change (2000 to 2018)]



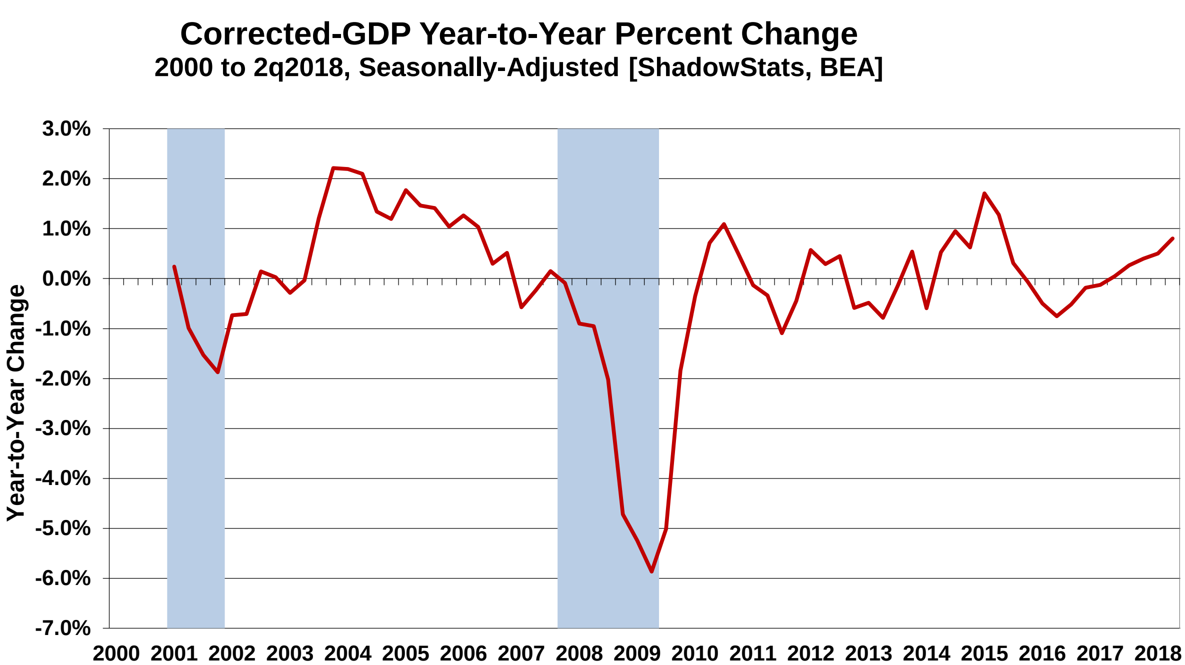
Headline Real GDP and Corrected for the Understatement of Headline Inflation

Graph 9: "Corrected" Real GDP Index (2000 - 2018), Second-Estimate of Second-Quarter 2018

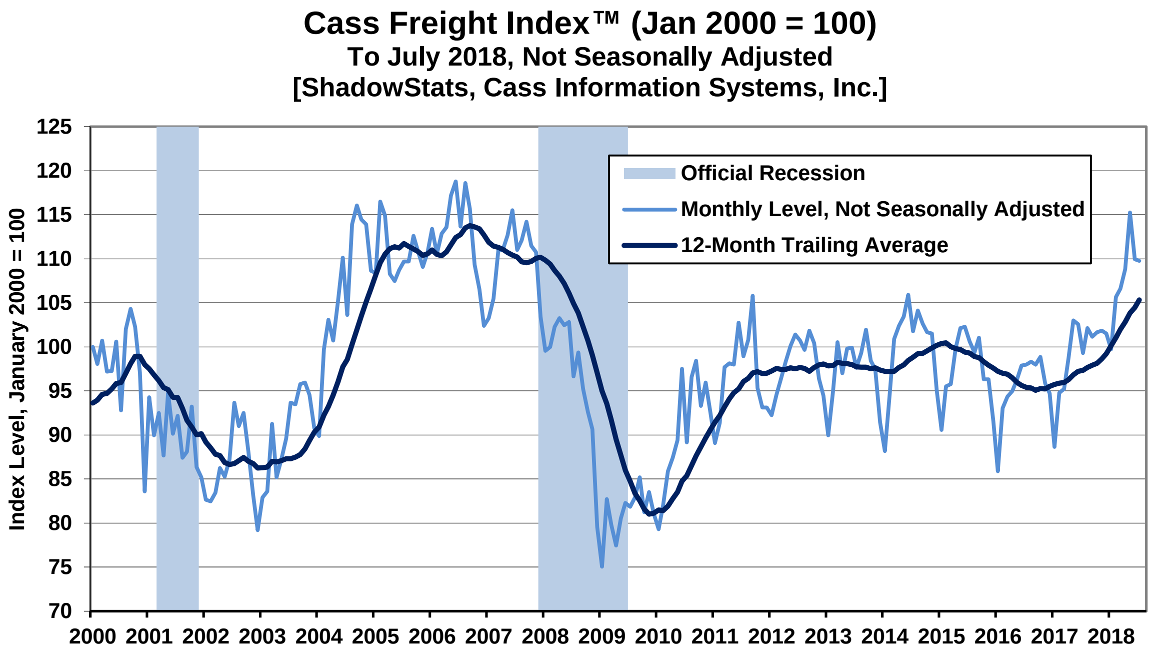
(Abbreviated Version of Graph OC-4 in the Opening Comments)



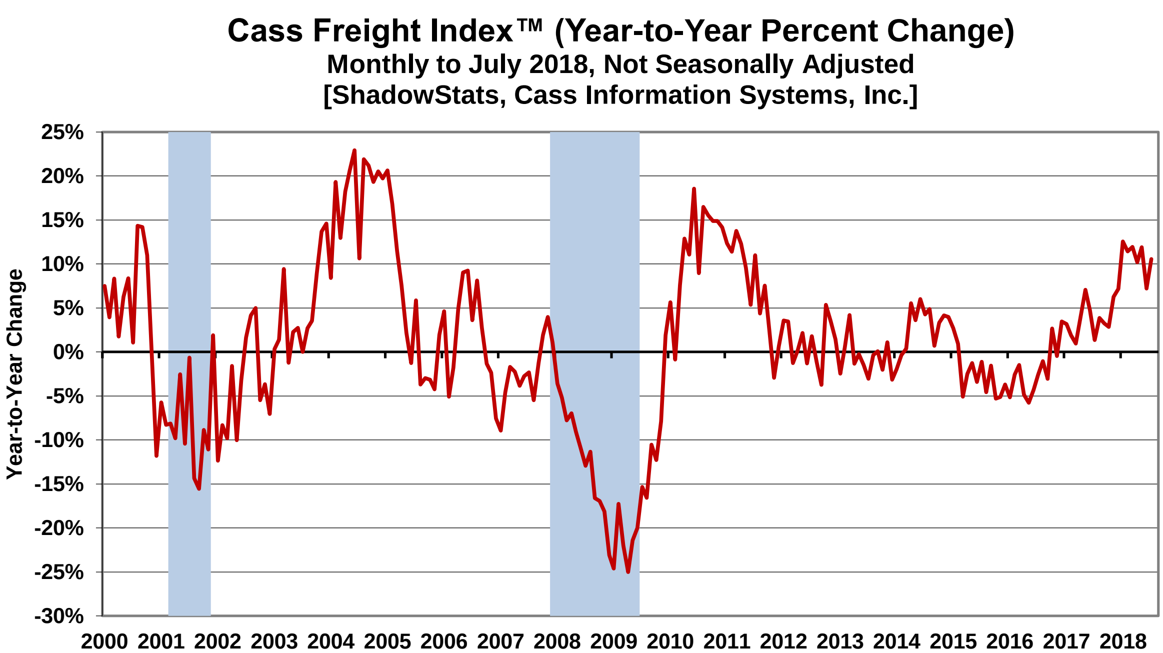
Graph 10: Corrected-GDP, Year-to-Year Percent Change (2000 to Second-Quarter 2018)



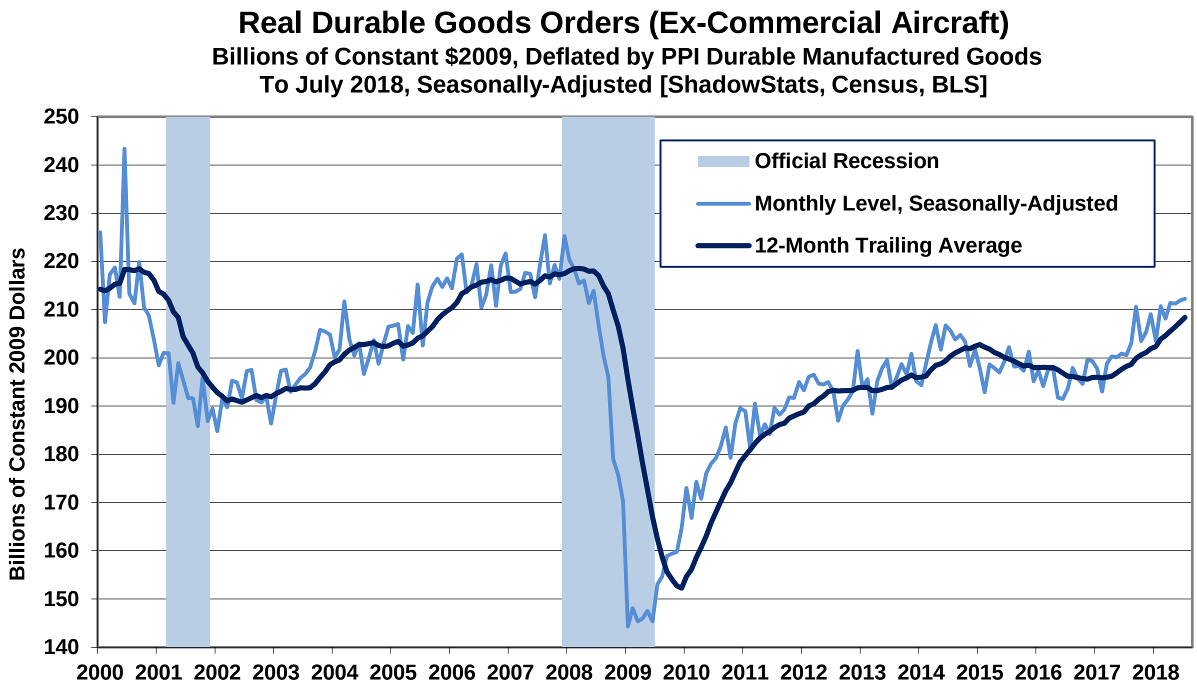
Graph 11: CASS Freight Index™ Moving-Average Level (2000 to July 2018)
(Same as Graph OC-3 in Commentary No. 966)



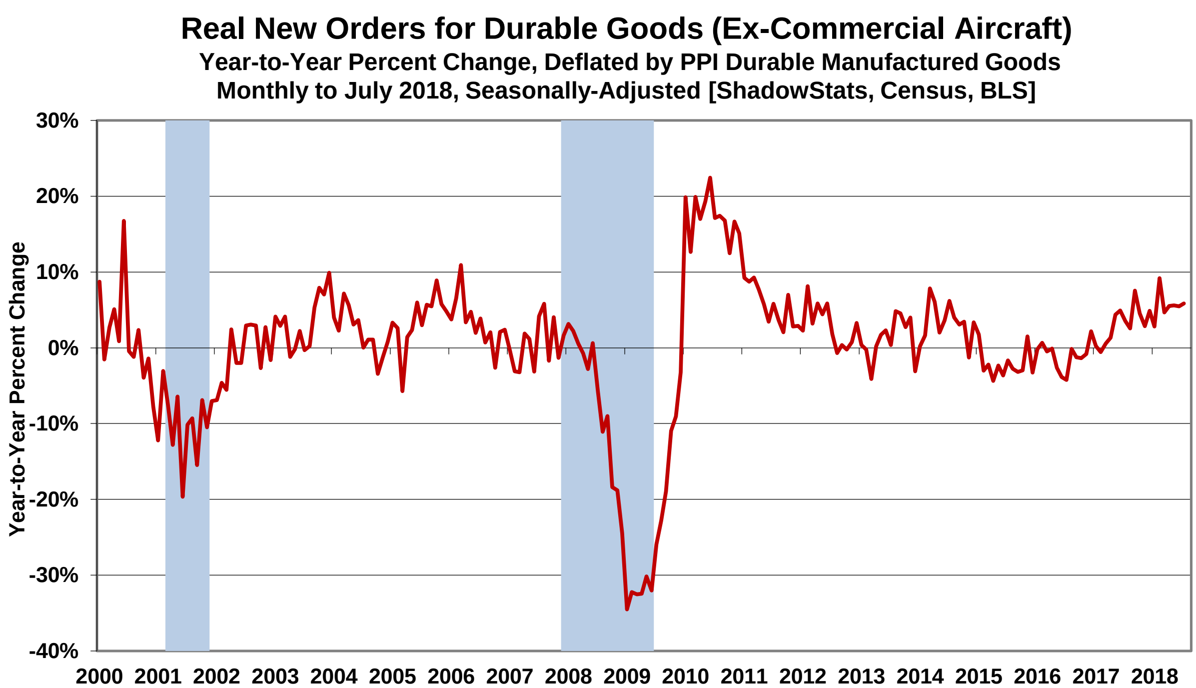
Graph 12: CASS Freight Index, Monthly Year-to-Year Percent Change (2000 to July 2018)
(Same as Graph OC-7 in Commentary No. 966)



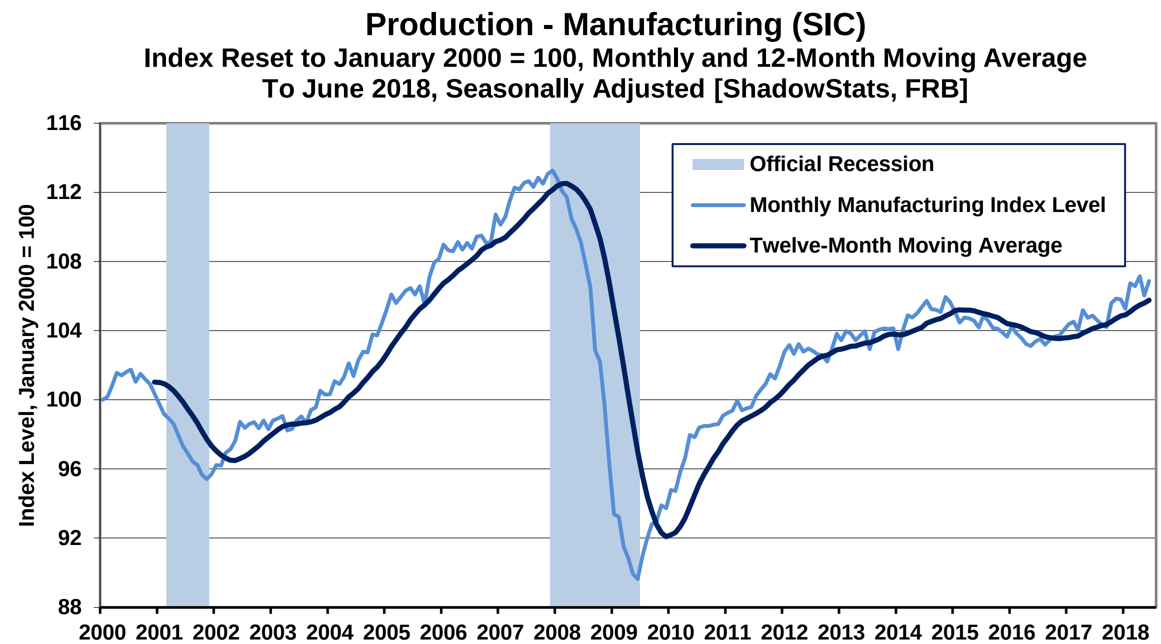
Graph 13: New Orders for Durable Goods, 12-Month Moving-Average Level (2000 to July 2018)
(Same as Graph 2 in Commentary No. 967)



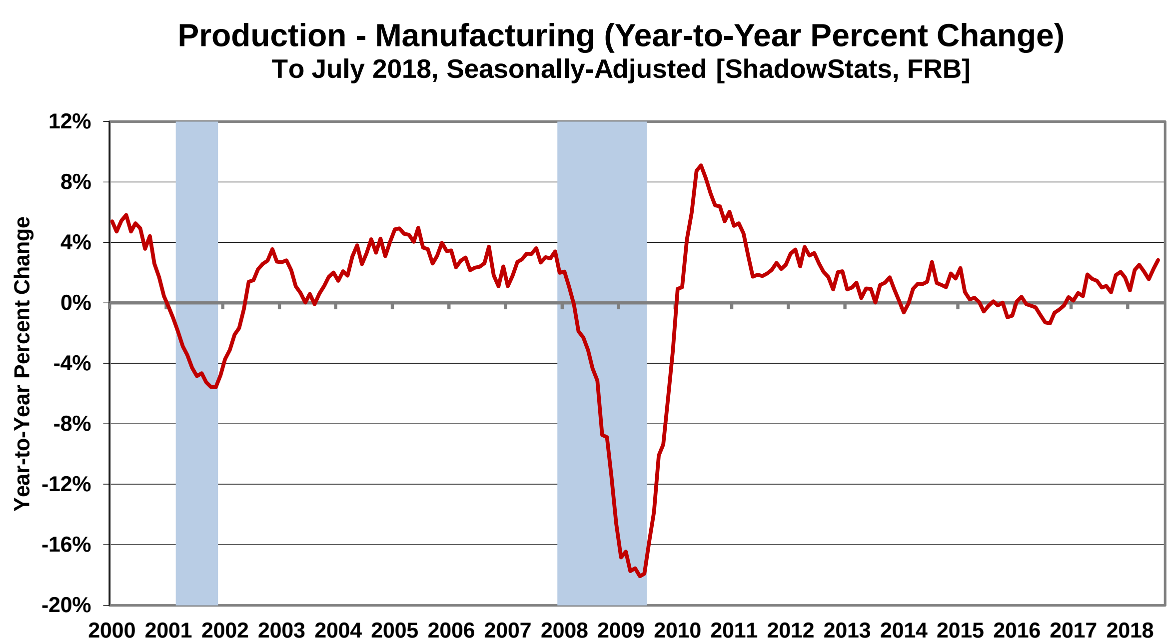
Graph 14: New Orders for Durable Goods, Year-to-Year Percent Change (2000 to July 2018)
(Same as Graph 5 in Commentary No. 967)



Graph 15: Industrial Production-Manufacturing, 12-Month Moving-Average Level (2000 to July 2018)
(Same as Graph OC-3 in Commentary No. 966)

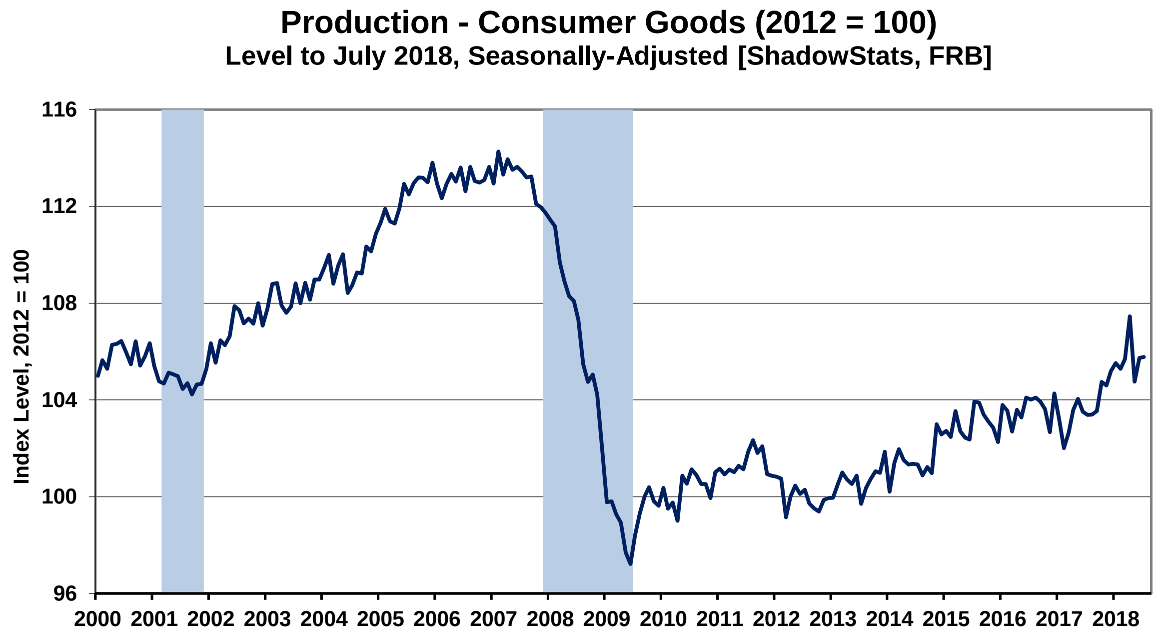


Graph 16: Manufacturing, Year-to-Year Percent Change (2000 to July 2018)
(Same as Graph 16 in Commentary No. 966)

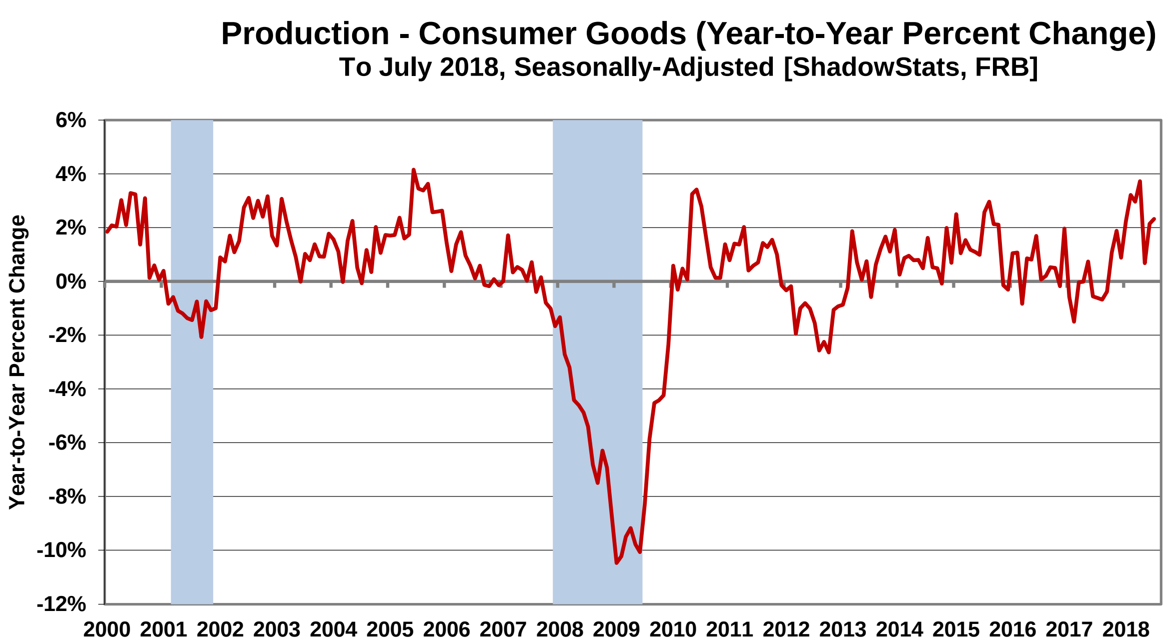


Graph 17: U.S. Industrial Production – Consumer Goods (2000 to July 2018)

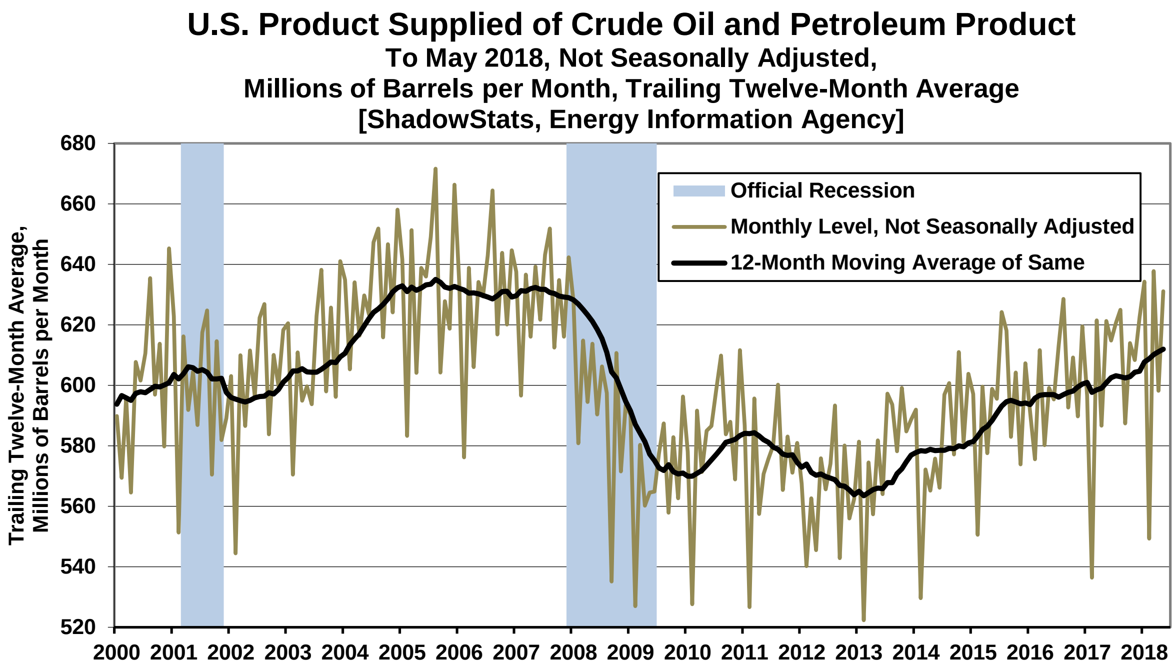
(Same Graph 19 in [Commentary No. 966]())



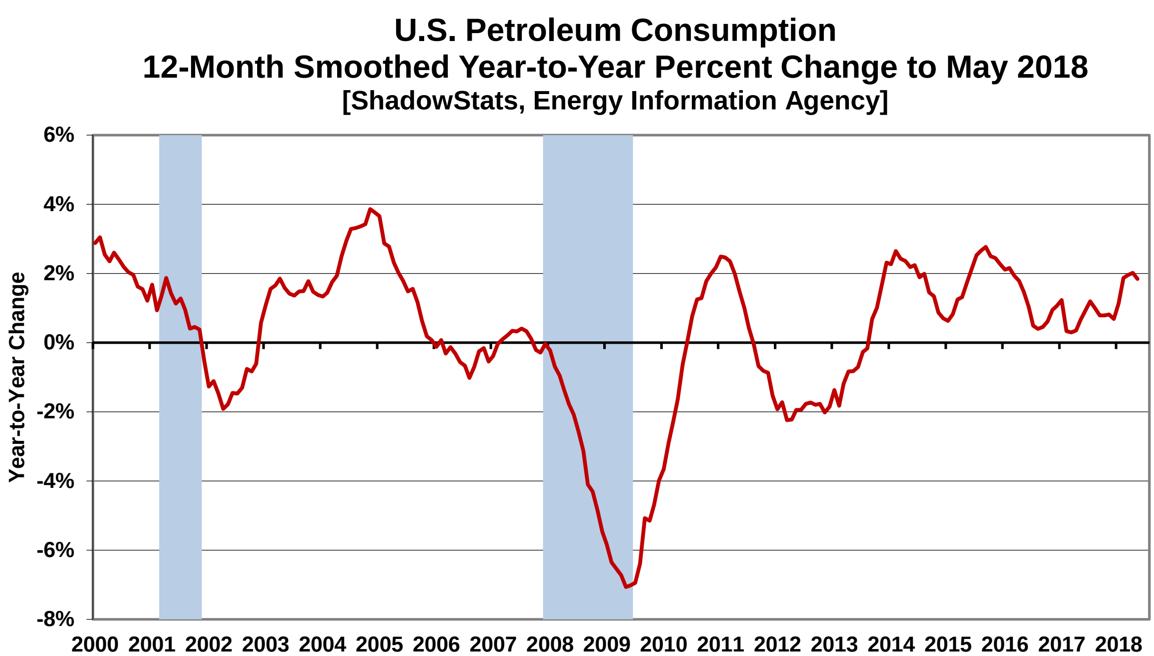
Graph 18: U.S. Industrial Production – Consumer Goods (2000 to July 2018)



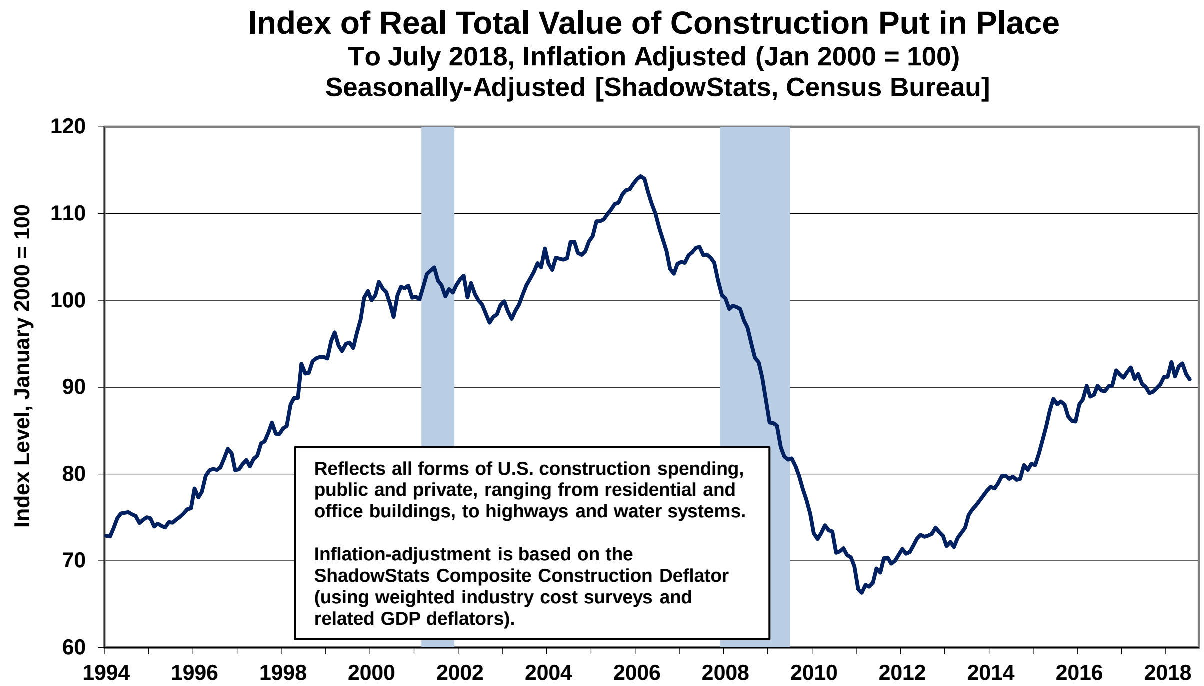
Graph 19: U.S. Petroleum Consumption (2000 – May 2018)



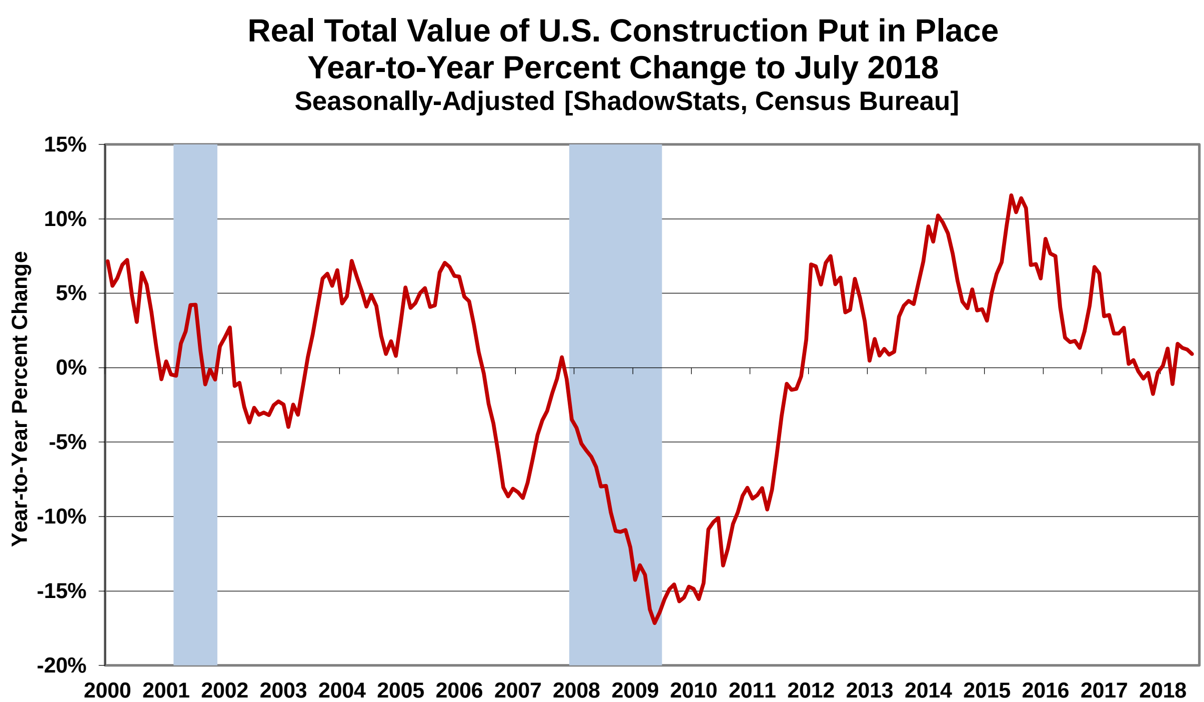
Graph 20: Year-to-Year Change, U.S. Petroleum Consumption (2000 – May 2018)



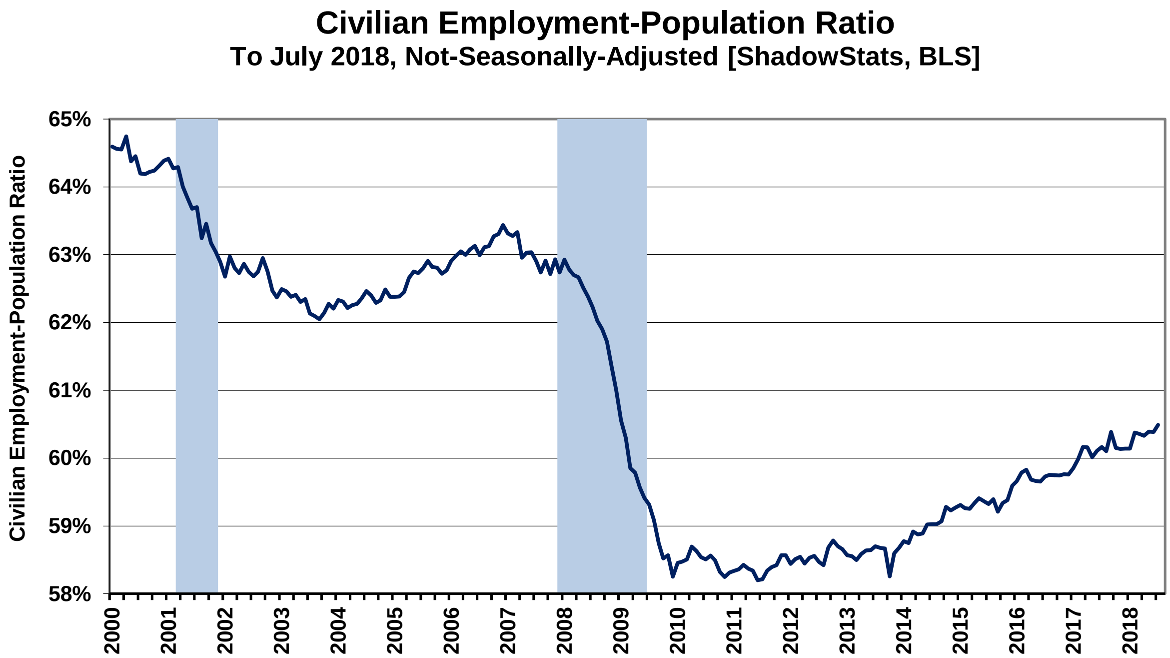
Graph 21: Real Total U.S. Construction Spending (2000 – July 2018)



Graph 22: Year-to-Year Percent Change Real Total U.S. Construction Spending (2000 – July 2018)



Graph 23: Civilian Employment-Population Ratio (2000 - June 2018)
(See Graph 3 in Commentary No. 964-A)



The comparative *Graph 11* shows the Cass Freight Index™ measure of North American freight volume through July 2018, used with the permission of Cass Information Systems, Inc. Few measures better reflect the actual flow of goods in commerce than freight activity (see the *Opening Comments* of *Commentary No. 956*). As a broad measure of basic domestic economic activity, the index has much more in common with the "corrected" GDP in *Graph 9*, than with the headline GDP of *Graph 8*.

Graph 13 reflects July 2018 New Orders for Durable Goods, *Graph 15* plots July 2018 Manufacturing and *Graph 17* reflects production of Consumer Goods. *Graph 19* of U.S. Petroleum Consumption, and *Graph 21* of inflation-adjusted total U.S. Construction Spending, which includes everything from roads and office buildings to residential construction, are among the variety of indicators that show patterns of economic collapse into 2009/2011, followed by some minimal (not full) recovery and ongoing stagnation/downturn.

Graph 35 of the employment-to-population ratio also remains a solid indicator of underlying labor conditions and economic activity, in the context of the broad population and long-term discouraged and displaced workers, reflected there through July 2018. The higher the ratio, usually the healthier the labor conditions and the stronger the economy.

[Section III: SECOND-CUT COMPREHENSIVE GDP BENCHMARK REVISION begins on the next page.]

Section III: SECOND-CUT COMPREHENSIVE GDP BENCHMARK REVISIONS

Revisions Pivoted on 4th-Qtr 2007 Pre-Recession Peak, Pre-Peak Down, Post-Peak Up

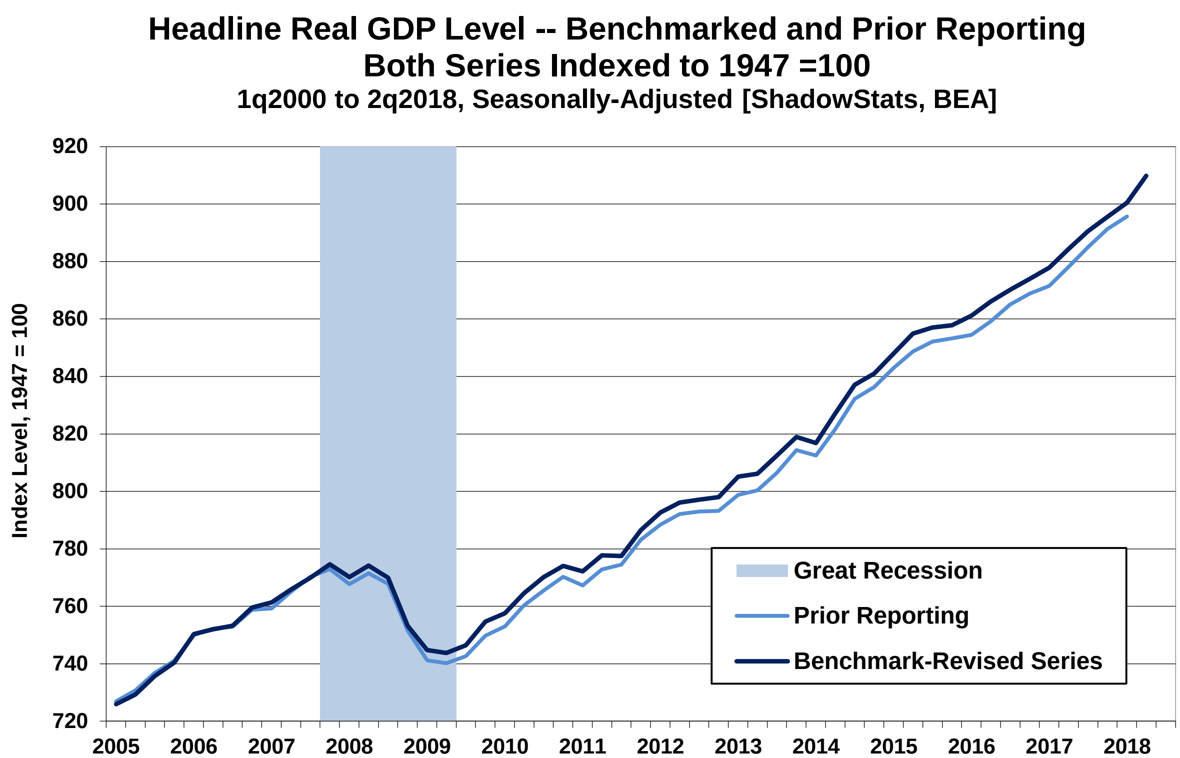
Revisions Had Some Unusual Twists. The Bureau of Economic Analysis's (BEA) 2018 Comprehensive Benchmark Revision of the Gross Domestic Product and related series, received a ShadowStats "First-Cut" assessment in *Commentary No. 962* of July 27th (see the *Press Release, Benchmarking and First Estimate 2q2018*), which is incorporated here by reference. In the context of that material and the August 31st release of the second estimate of second-quarter GDP (see *Press Release Second Estimate 2q2018*) the ShadowStats near-term economic outlook has not changed.

Noted in the "First-Cut," the "GDP is a political and Wall Street puff piece. It safely is the most heavily gimmicked and massaged economic number published by the U.S. government."

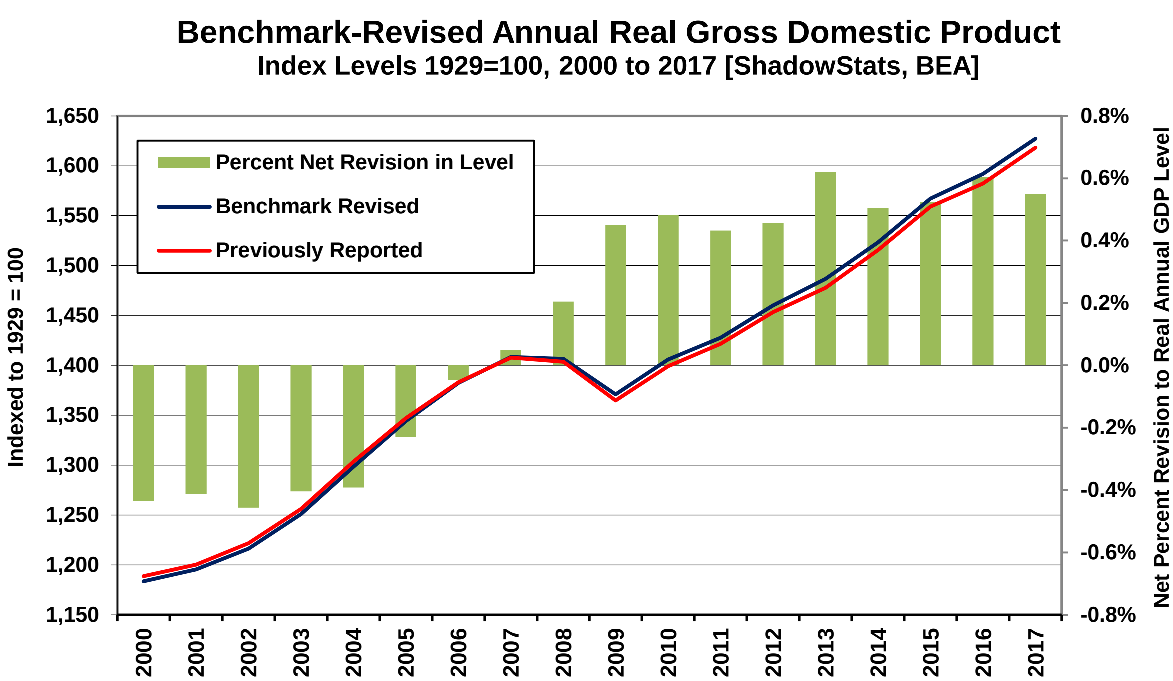
That image safely survived a closer review of the numbers. The Comprehensive Benchmark Revision went back to 1929, along with resetting the base year for inflation adjust from 2009-based dollars to 2012-based dollars. Such made the hard numbers by year or quarter difficult to compare on a consistent basis. An early effort in *Commentary No. 962* to index the quarterly GDP levels to 100 in 1947 for both the old and new series, where 1947 was the first year in which quarterly numbers were published, but that did not generate comparisons that were particularly meaningful. I found subsequently, however, that benchmarking both the 2009 and 2012 series to 1929 = 100 worked well, where 1929 was the first year of the series.

Benchmarked Growth Revisions Pivoted on the Fourth-Quarter 2007 Business Cycle Peak, Softening the Depth of the Great Recession, Adding Some Extra Growth to Current GDP. Looking at the new versus old series on the same basis provided new insight as to how the "benchmarked" data had been massaged. Shown in *Graph 24*, the two series began to diverge visually with a widening differential in the mid-2000s. What quickly became apparent was the benchmarked growth patterns pivoted on fourth-quarter 2007, the pre-recession peak of the Great Recession, the quarter before the economic collapse into 2009. Reflected in *Graph 25*, before the recession, before Fourth-Quarter 2007, growth revised lower. After Fourth-Quarter 2007, growth revised higher, with upside biases still carrying forward into the latest GDP reporting. For example, pre-benchmarking, the peak to trough (2007 to 2009) real contraction narrowed from 4.24% (-4.24%) to 3.98% (-3.98%), while the 2011 to 2017 expansion widened from 15.31% to 15.52%

Graph 24: Benchmark-Revised GDP, Plot of Comparative Indexed Levels of Activity Before and After Revisions

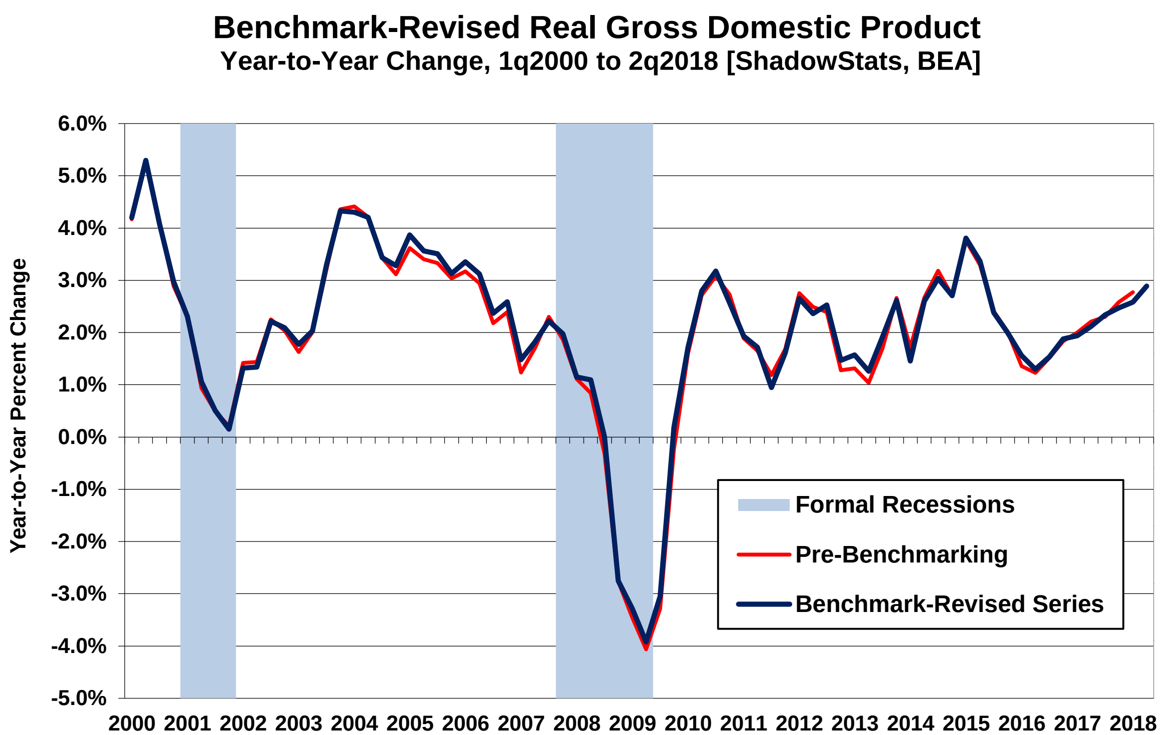


Graph 25: Benchmark-Revised GDP, Plot of Comparative Indexed Levels of Activity Before and After Revisions

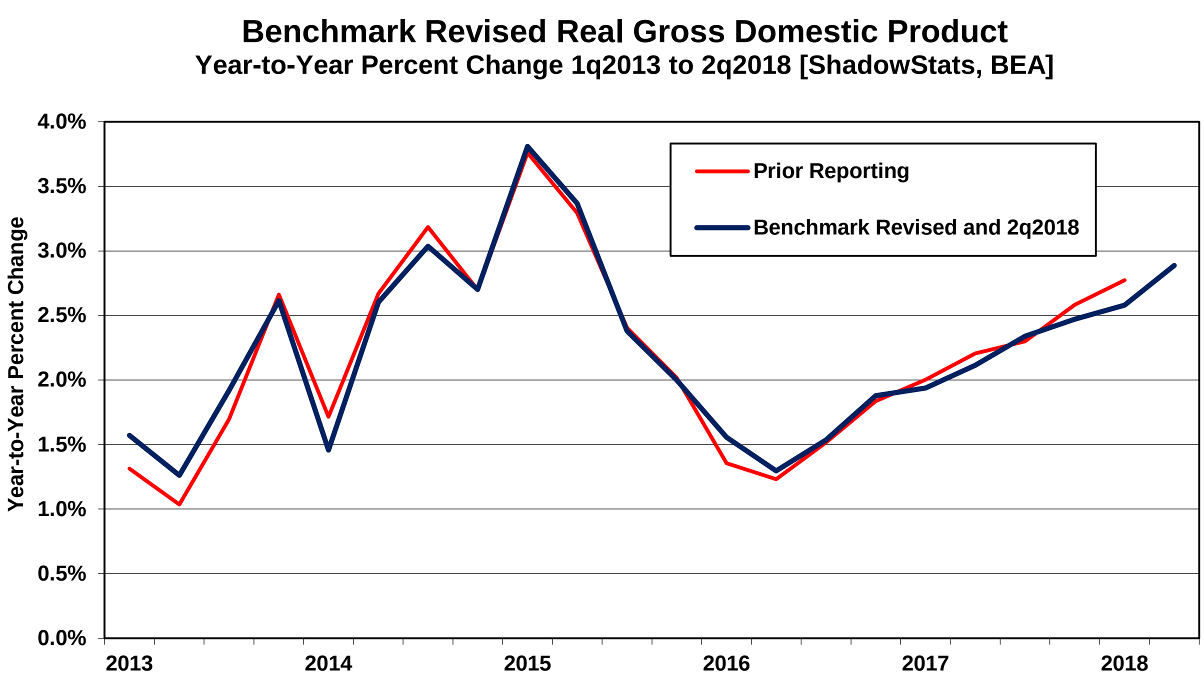


Graphs 26 to 35 plot various comparisons of pre- and post-benchmark year-to-year and quarter-to-quarter revised real growth patterns for Gross Domestic Product (GDP), Gross Domestic Income (GDI), Gross National Product (GNP) and the Implicit Price Deflator (IPD).

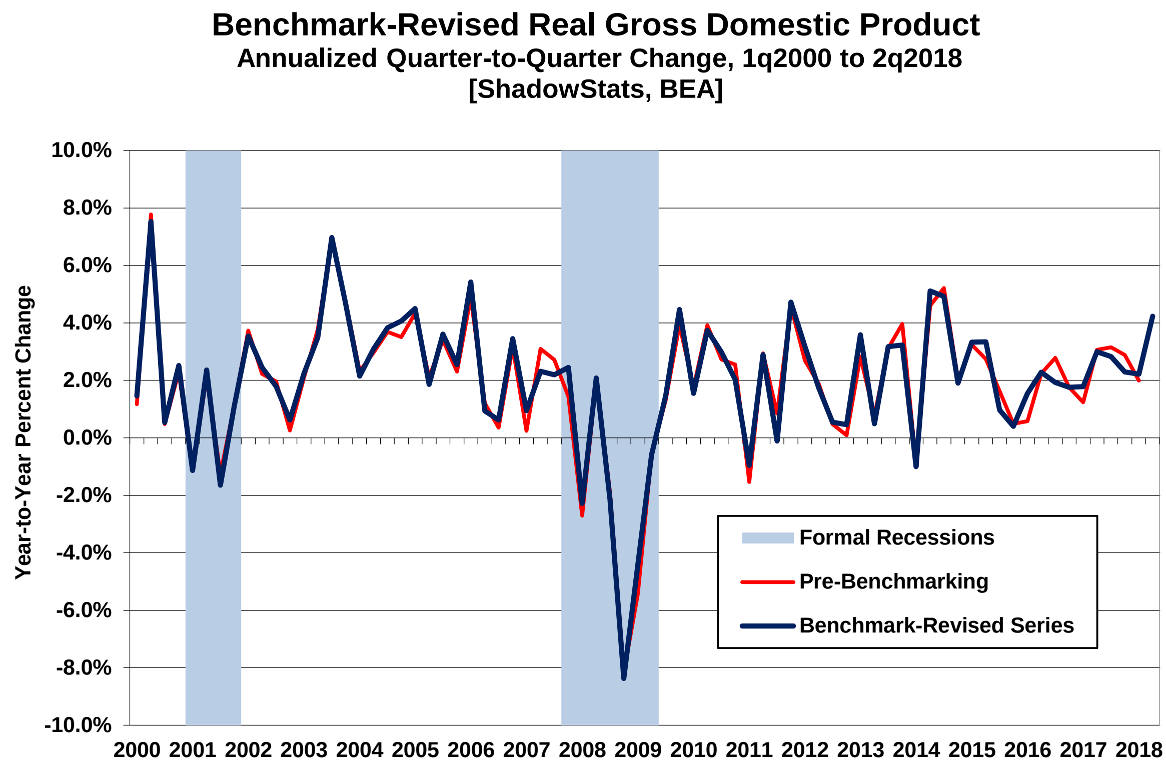
Graph 26: Benchmark-Revised Real Year-to-Year Percent Change in the GDP 2000 to Date



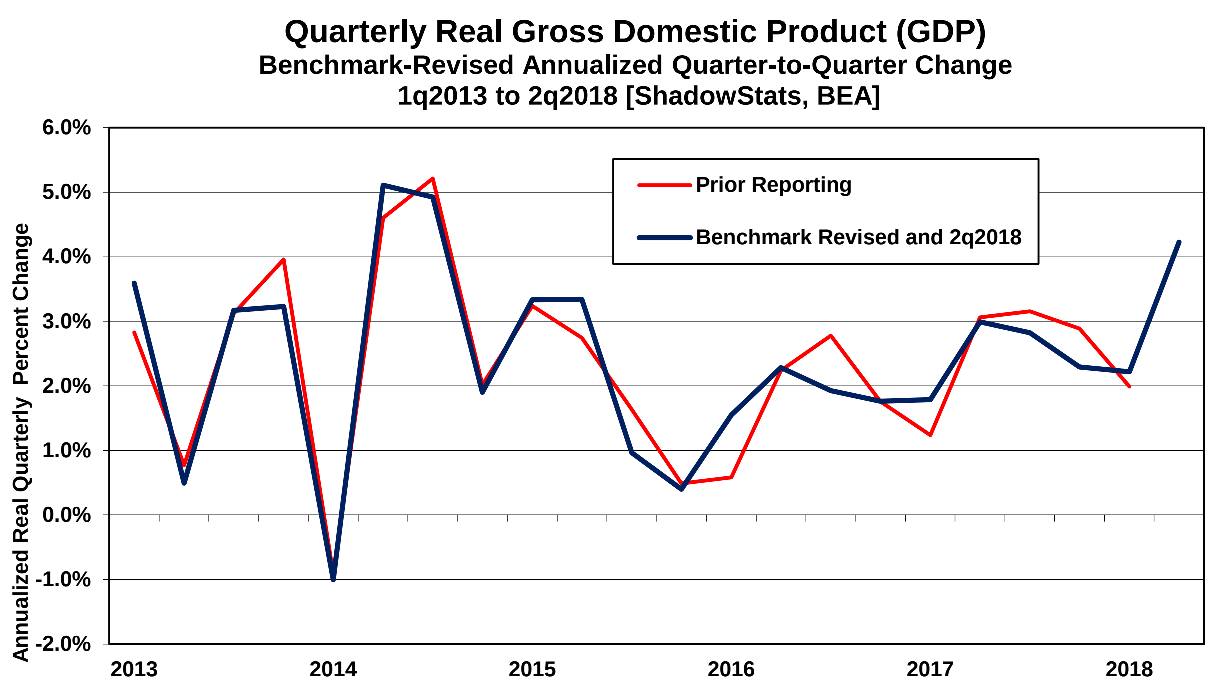
Graph 27: Benchmark-Revised Real Year-to-Year Percent Change in the GDP 2013 to Date



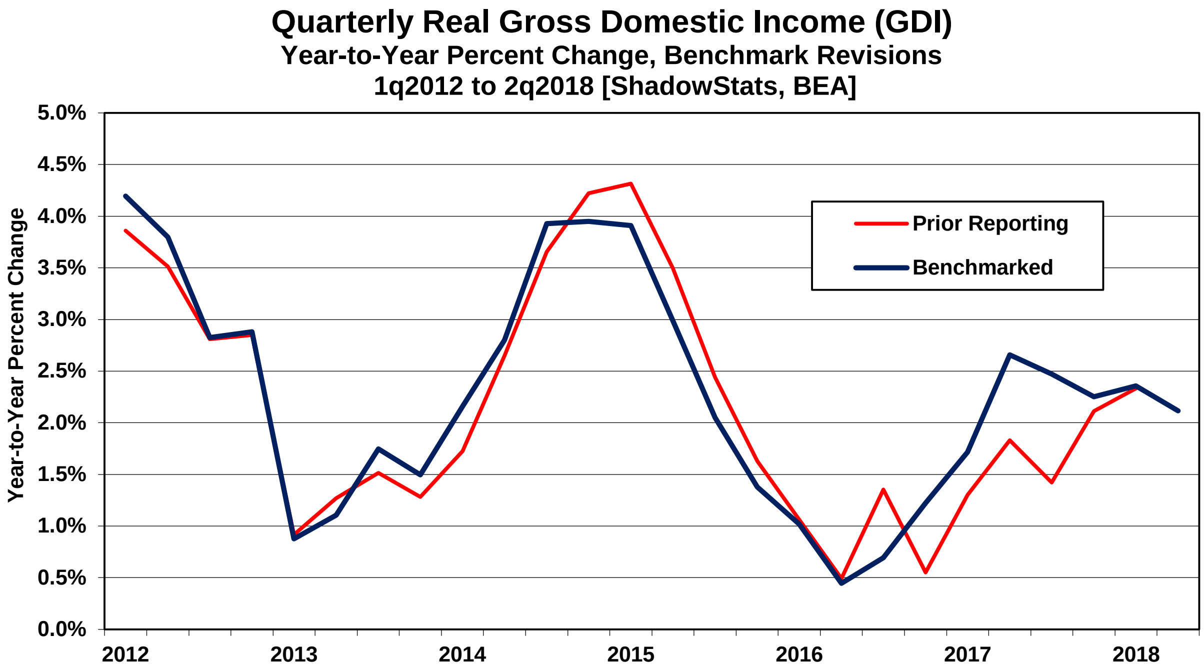
Graph 28: Benchmark-Revised Real Annualized Quarter-to-Quarter Change in the GDP, 2000 to 2018



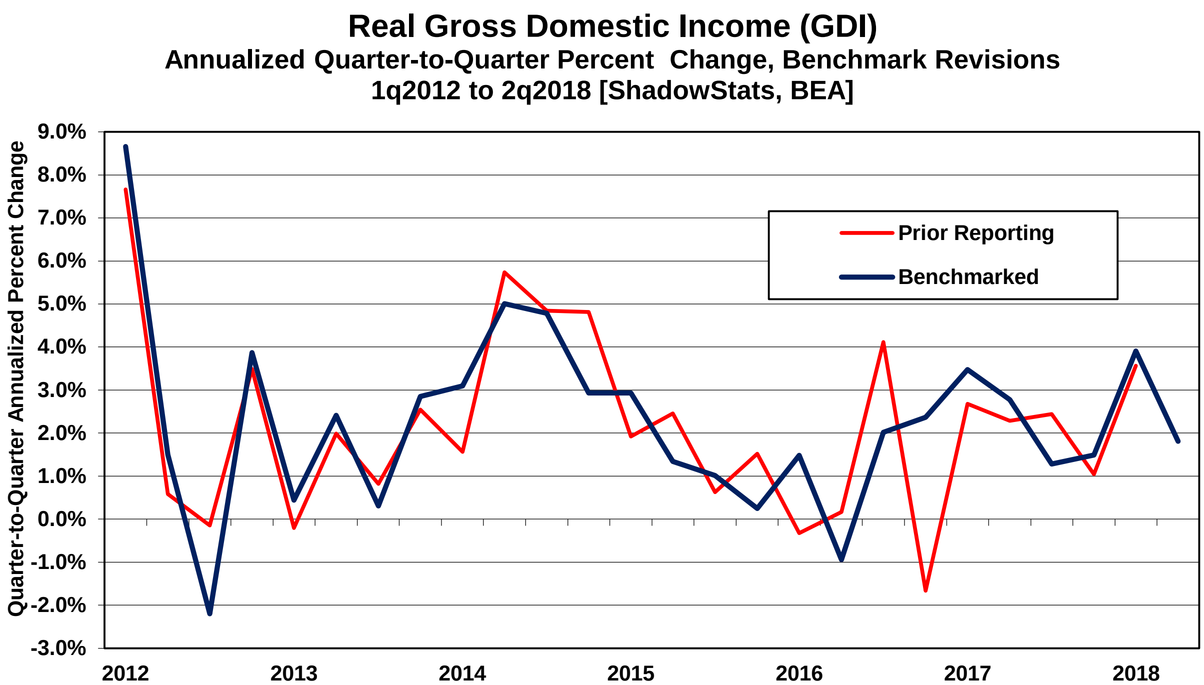
Graph 29: Benchmark-Revised Real Annualized Quarter-to-Quarter Change in the GDP, 2013 to 2018



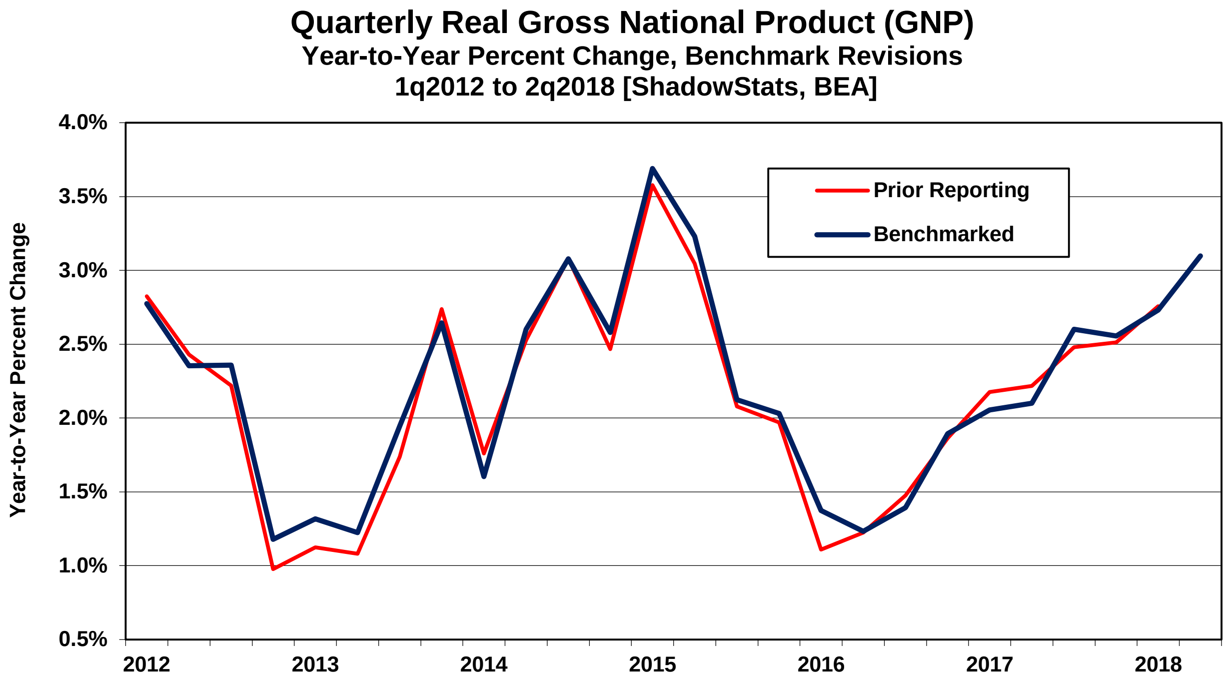
Graph 30: Benchmark-Revised Real Year-to-Year Percent Change in the GDI 2012 to Date



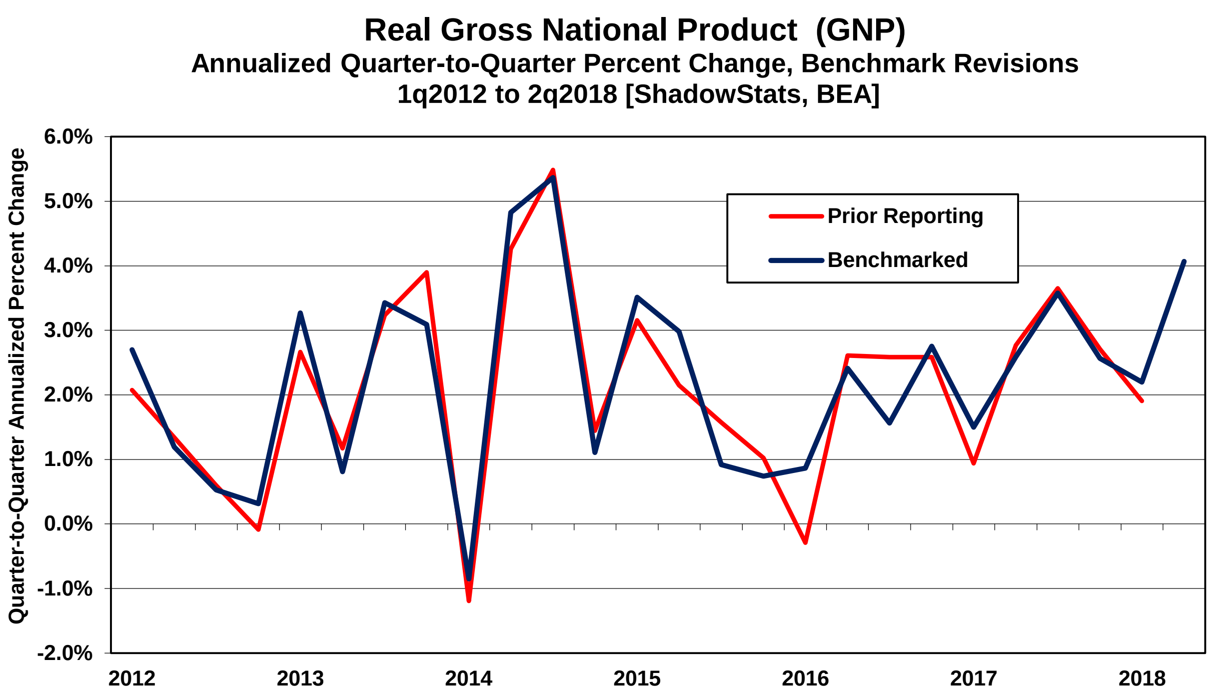
Graph 31: Benchmark-Revised Real Annualized Quarter-to-Quarter Change in the GDI, 2012 to 2018



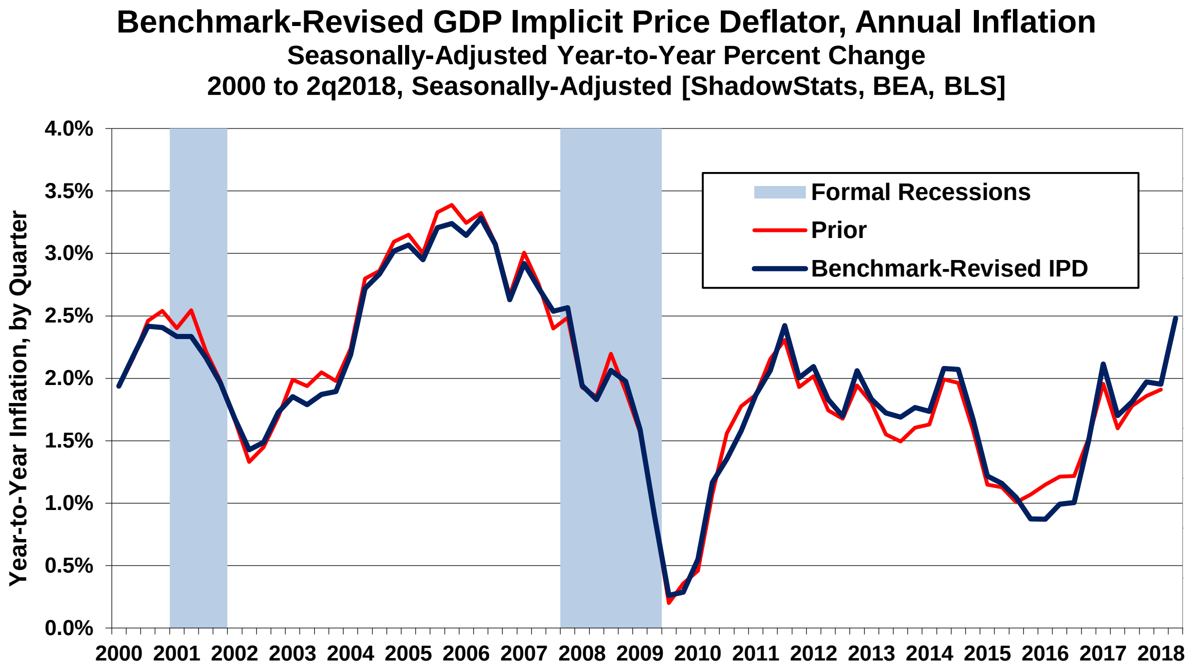
Graph 32: Benchmark-Revised Real Year-to-Year Percent Change in the GNP 2012 to Date



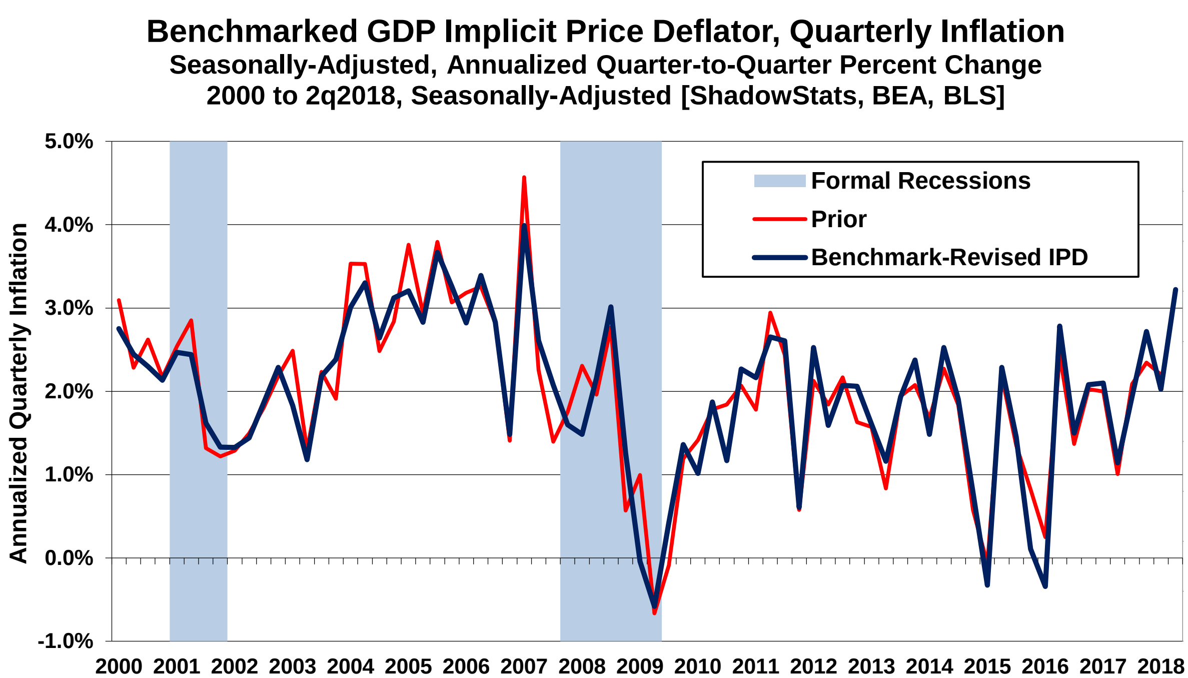
Graph 33: Benchmark-Revised Real Annualized Quarter-to-Quarter Change in the GDP, 2012 to 2018



Graph 34: Year-to-Year Inflation, Revisions and Second-Estimate, Second-Quarter 2018 IPD, 2000-2018)



Graph 35: Benchmark-Revised GDP Implicit Price Deflator (IPD), Annualized Quarterly GDP Inflation



[Week, Month and Year Ahead Section begins on the next page.]

WEEK, MONTH AND YEAR AHEAD

Risks of U.S. Dollar and Financial-Market Turmoil Remain Intense, Amidst Mounting Fiscal, Liquidity and Political Concerns, Along With Increasingly Faltering Headline Economic Activity. [Comments here are little changed from the prior version.] In the context of weakening systemic- and consumer-liquidity trends (see today's *Opening Comments* and those of *Commentary No. 967* and *Commentary No. 966*, *Hyperinflation Watch – No. 3*, *Consumer Liquidity Watch – No. 4* and *Commentary No. 959-B*), the headline economic outlook likely will continue to dim rapidly as seen in the recent, intensifying downturn in the housing and construction markets, despite the headline ShadowStats "Corrected" GDP being off bottom and growing quarter-to-quarter (again, see today's *Opening Comments*).

Hyperinflation Watch – No. 3 reviewed the broad outlooks for the U.S. economy, the U.S. dollar, gold, silver and the financial markets (again, see the *Opening Comments* of *Commentary No. 967*). Such expanded upon the annual review in *Special Commentary No. 935*. The broad outlook on the economy has not changed. Weaker economic growth and renewed, faltering economic headlines should continue to follow. The fundamental outlook for U.S. dollar and related market circumstances also broadly have not changed from the related vulnerabilities discussed in earlier missives.

The dollar and financial markets remain at extraordinarily-high risk of intense, panicked declines, possible at any time. Holdings of physical gold and silver remain the ultimate hedges—stores of wealth—for preserving the purchasing power of one's U.S. dollar assets, during times of high inflation and currency debasement, and/or political- and financial-system upheaval.

Please call (707) 763-5786, if you would like to discuss current circumstances, or otherwise.

Best wishes – John Williams

[Pending Economic Releases are covered on the next page.]

PENDING ECONOMIC RELEASE:

Employment and Unemployment (August 2018). The Bureau of Labor Statistics (BLS) will publish its headline August 2018 labor numbers on Friday, September 7th, with at least summary coverage of the detail in *Commentary No. 969-A* of that date, with some extended coverage likely in a *Commentary No. 969-B*, over the weekend. The consensus outlook purportedly is for some increase in the payroll gain from July's headline gain of 157,000 into the 190,000-to-200,000 jobs range, with headline U.3 unemployment expected to narrow to 3.8% from 3.9% in July.

Negative surprises remain a fair bet, with a weaker-than-expected gain in payrolls, and higher than-expected-unemployment rate, all in context of a monthly downturn in the Conference Board Help Wanted OnLine® advertising, as graphed and discussed on pages 6 and 7.

Both the heavily-stressed Household Survey measures (Employment-Population Ratio and Participation Rate) and Payroll Survey year-to-year gain likely will continue under negative pressure.

LINKS TO PRIOR COMMENTARIES, SPECIAL REPORTS AND OTHER WRITINGS

Most Recent Watches:

The ***Consumer Liquidity Watch*** of August 10th: *Consumer Liquidity Watch – No. 4*.

The ***Hyperinflation Watch*** of August 12th: *Hyperinflation Watch – No. 3*.

The latest Watches always are available on www.ShadowStats.com and by link from the current *Commentary*, with updates advised by e-mail.

Prior Writings Underlying the Regular and *Special Commentaries*: Underlying the recent *Special Commentary No. 935* *(Part One)* and the pending *Special Commentaries (Part Two)* on Inflation, and *(Part III)* on the Federal Reserve and U.S. banking system, are *Commentary No. 899* and *General Commentary No. 894*, along with general background from regular *Commentaries* throughout 2017.

These missives also are built upon writings of prior years, including *No. 777 Year-End Special Commentary* (December 2015), *No. 742 Special Commentary: A World Increasingly Out of Balance* (August 2015) and *No. 692 Special Commentary: 2015 - A World Out of Balance* (February 2015). In turn, they updated the long-standing hyperinflation and economic outlooks published in *2014 Hyperinflation Report—The End Game Begins – First Installment Revised* (April 2014) and *2014 Hyperinflation Report—Great Economic Tumble – Second Installment* (April 2014).

The two *Hyperinflation* installments remain the primary background material for the hyperinflation circumstance. Other references on underlying economic reality are the *Public Commentary on Inflation Measurement* and the *Public Commentary on Unemployment Measurement*.

Recent Regular Commentaries: *[Listed here are* Commentaries *of the last several months or so, plus recent* Special Commentaries *and a sampling of others covering a variety of non-monthly issues, including annual benchmark revisions, dating back to the beginning of 2017. Please Note: Complete ShadowStats archives back to 2004 are found at www.ShadowStats.com (left-hand column of home page).]*

These regular *Commentaries* usually are published at least weekly, with *Consumer Liquidity* and *Hyperinflation Watches* updated about every two weeks or so, updating general economic, consumer-liquidity and financial-market circumstances as they develop.

Flash Commentary No. 968-Advance (August 29th) provided a summary review of the headline first revision, second estimate of Second-Quarter 2018 GDP and initial estimates of GDI and GNP. Also updated early indications from the latest Consumer Liquidity measures.

Commentary No. 967 (August 24th) discuused the annual squirrely season and reviewed July 2018 New Orders for Durable Goods and New- and Existing-Home Sales.

Commentary No. 966 (August 17th) reviewed July 2018 Retail Sales, Industrial Production, New Residential Construction and the CASS Freight Index™.

Commentary No. 965 (August 12th) covered the July 2018 Consumer and Producer Price Indices (CPI and PPI), and Real Average Weekly Earnings and deteriorating consumer liquidity conditions.

Commentary No. 964-A (August 3rd) preliminary coverage of July 2018 Employment/Unemployment, Conference Board Help Wanted OnLine® Advertising, M3 and the June Trade Deficit and Construction Spending.

Commentary No. 963 (July 31st) reviewed June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index, all in the context of the GDP revisions and unfolding, underlying economic reality.

Commentary No. 962 (July 27th) provided initial coverage of the first or "advance" estimate of Second-Quarter 2018 Gross Domestic Product (GDP) and the Comprehensive Benchmark Revisions to the series back to 1929. A full update and extended coverage are in today's (September 4th) *Special Commentary.*

Commentary No. 961 (July 26th) provided full coverage on New Residential Investment (Housing Starts, Building Permits and New- and Existing-Home Sales. Preliminary coverage was provided on June Retail Sales, Industrial Production, New Orders for Durable Goods and the Cass Freight Index™, all of which were expanded upon in *Commentary No. 963.*

Commentary No. 960 (July 15th) reviewed the June Consumer and Producer Price Indices (CPI and PPI), Real Earnings and related implications for consumer and systemic liquidity

Commentary No. 959-B (July 11th) provided extended detail on June 2018 Employment and Unemployment, the May 2018 Trade Deficit and updated economic outlook, along with expanded discussion on issues affecting the credibility of the headline employment and unemployment data.

Commentary No. 959-A (July 6th) provided flash headlines and summary details of the June 2018 Employment and Unemployment and the May 2018 Trade Deficit, expanded upon in *Commentary No. 959-B* and headline coverage of June 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 958 (July 3rd) covered May 2018 Construction Spending and the accompanying annual benchmarking to that series.

Commentary No. 957 (July 1st) covered May 2018 New Orders for Durable Goods and the third estimate of First-Quarter 2018 Gross Domestic Product (GDP) and the coincident second estimates of Gross National Product (GNP) and Gross Domestic Income (GDI).

Commentary No. 956 (June 27th) reviewed May 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), New- and Existing-Home Sales, along with detail on the May 2018 Cass Freight Index™ and some potential twists to the pending July 27th Comprehensive Benchmark Revision to the GDP.

Commentary No. 955 (June 18th) analyzed May 2018 inflation as reported with the May 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* covering FOMC policy, the U.S. dollar and financial markets. Summary headline details also were provided for May Retail Sales, Industrial Production and the Cass Freight Index™.

Commentary No. 954 (June 8th) reviewed the comprehensive annual benchmark revisions to the Trade Deficit, in the context of recent benchmark revisions to other major economic series and implications for the pending GDP benchmark revisions. Such also covered the headline reporting of the April 2018 headline Trade Deficit detail and an updated Consumer Liquidity Watch.

Commentary No. 953-B (June 5th) analyzed the discrepancies between the record-low headline unemployment rate and near-record-high readings of labor-market stress, in the context of extended coverage the May 2018 Employment and Unemployment and April 2018 Construction Spending, previously headlined in *No. 953-A*.

Commentary No. 953-A (June 1st) provided flash headlines and summary details of the May 2018 Employment and Unemployment and April 2018 Construction Spending, expanded upon in the supplemental coverage of *Commentary No. 953-B.* Current monetary conditions were reviewed, along with the initial estimate of annual growth in the May 2018 ShadowStats Ongoing Estimate of Money Supply M3.

Commentary No. 952 (May 30th) reviewed the second estimate of First-Quarter 2018 GDP, initial estimates of first-quarter GNP and GDI, extended detail on the annual benchmarking of the Retail Sales series, and headline coverage of the May 2018 Conference Board Help Wanted OnLine® Advertising.

Commentary No. 951 (May 25th) reviewed April 2018 New Orders of Durable Goods, in the context of the annual revisions (see prior *No. 950*), New- and Existing-Home Sales and brief coverage of the annual benchmarking of the Retail Sales series.

Commentary No. 950 (May 20th) reviewed April Retail Sales, Industrial Production, New Residential Construction (Housing Starts, Building Permits and annual revisions), the Cass Freight Index™ and annual benchmark revisions to Manufacturers' Shipments, including New Orders for Durable Goods.

Commentary No. 949 (May 11th) reviewed inflation as reported with the April 2018 Consumer and Producer Price Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 948 (May 9th) explored unusual circumstances with April 2018 Employment and Unemployment numbers, along with the April Conference Board Help Wanted OnLine® Advertising, April Monetary Conditions, the March Trade Deficit and Construction Spending, along with the reintroduction of Sentier Research's monthly Real Median Household Income to March 2018.

Commentary No. 947 (April 27th) detailed the first estimate of First-Quarter 2018 GDP and the related Velocity of Money, March New Orders for Durable Goods, New- and Existing-Home Sales and the "advance" estimate of the March 2018 merchandise goods deficit.

Commentary No. 946 (April 22nd) covered March 2018 Retail Sales, Industrial Production, New Residential Construction (Housing Starts and Building Permits), the Cass Freight Index™ and a review of the current state of the GDP reporting and an outlook for first-quarter 2018 activity.

Commentary No. 945 (April 11th) reviewed the March 2018 Consumer and Producer Prices Indices (CPI and PPI), Real Average Weekly Earnings, along with the latest *Hyperinflation Watch* on the U.S. dollar and financial markets.

Commentary No. 944 (April 8th) covered March 2018 Employment and Unemployment, the March Conference Board Help Wanted OnLine® Advertising, March Monetary Conditions and the full February Trade Deficit and Construction Spending.

Commentary No. 943 (March 29th) covered the third-estimate of, second-revision to Fourth-Quarter 2017 GDP and the only estimates to be made in current reporting of the GDI and GDP, as well as the "advance" estimate of the February merchandise trade deficit.

Commentary No. 942-B (March 27th) reviewed the Industrial Production annual benchmark revisions, general reporting-quality issues, February 2018 New Orders for Durable Good, New- and Existing-Home Sales and the Cass Freight Index™.

Commentary No. 942-A (March 23rd) provided a very brief summary of the much more extensive details covered in *Commentary 942-B.*

Commentary No. 941 (March 19th) covered February Industrial Production and New Construction Spending (Housing Starts and Building Permits), along with a general discussion in the *Opening Comments* on economic conditions and a preview of the Industrial Production benchmark revisions.

Commentary No. 940 (March 15th) covered February 2018 Retail Sales, CPI, PPI and related Real Average Weekly Earnings, real Annual Growth in M3 and updated financial market prospects.

Commentary No. 939 (March 9th) covered the February 2018 Employment and Unemployment details, the full reporting of the January 2018 Trade Deficit, February Conference Board Help Wanted OnLine® Advertising and February Monetary Conditions.

Commentary No. 938 (March 1st) reviewed January 2018 Construction Spending and the second estimate of Fourth-Quarter 2017 GDP.

Commentary No. 937 (February 27th) covered January 2018, New Orders for Durable, New- and Existing-Home Sales, the "advance" estimate of the January 2018 Merchandise Trade Deficit and the Cass Freight Index™.

Commentary No. 936 (February 19th) covered the January 2018 CPI and PPI, Retail Sales, Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Special Commentary No. 935 (February 12th) was the first part of a three part-series reviewing economic and financial conditions of 2017 and the year-ahead, inflation and the U.S. government's balance sheet and conditions in the U.S. banking system and Federal Reserve options.

Commentary No. 934-B (February 6, 2018) provided extended coverage on the January 2018 Employment and Unemployment details, the 2017 benchmark revisions to Payroll Employment and the January annual recasting of population, along with coverage of the December 2017 Trade Deficit.

Commentary No. 934-A (February 2, 2018) provided initial detail on the January 2018 Employment and Unemployment details and the 2017 benchmark revisions to Payroll Employment, along with coverage of January Conference Board Help Wanted OnLine® Advertising, January Monetary Conditions and December 2017 Construction Spending.

Commentary No. 933 (January 26, 2018) covered December New Orders for Durable Goods, the Cass Freight Index™ and the first estimate of Fourth-Quarter 2017 GDP.

Commentary No. 932 (January 18, 2018) covered December Industrial Production and New Residential Construction (Housing Starts and Building Permits).

Commentary No. 931 (January 15, 2018) reviewed December 2017 Retail Sales and the CPI and PPI, along with an update on the U.S. dollar, the financial markets and gold graphs.

Commentary No. 930-B (January 8th) expanded upon the December 2017 Employment and Unemployment numbers and Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending, otherwise headlined in *No. 930-A*.

Advance Commentary No. 930-A (January 5, 2018) provided a brief summary and/or comments (all expanded in *Commentary No. 930-B*) on December 2017 Employment and Unemployment numbers, Household Survey benchmarking, Conference Board Help Wanted OnLine® Advertising, December Monetary Conditions and the November 2017 Trade Deficit and Construction Spending.

General Commentary No. 929 (December 28, 2017) reviewed current economic and market conditions at year-end 2017.

Commentary No. 926 (December 15, 2017) reviewed the headline November 2017 numbers for Retail Sales (both real and nominal), and Industrial Production, along a discussion on the dampening economic impact of business and consumer "uncertainty."

Commentary No. 909 (September 14, 2017) assessed the annual release of 2016 Real Median Household Income, along with a review of August Consumer Price Index (CPI) and the Producer Price Index (PPI) and an updated *Alert* on the financial markets.

Special Commentary No. 904 (August 14, 2017) issued an "Alert" on the financial markets (including U.S. equities, the U.S. dollar gold and silver, as well as FOMC policy), in the context of historical activity and unfolding circumstances of deteriorating economic and political conditions. Separately, headline details were reviewed for the July Consumer Price Index (CPI) and the Producer Price Index (PPI).

Commentary No. 902-B (July 31, 2017) reviewed the 2017 annual benchmark revisions of GDP and related series, along with the "advance" estimate of second-quarter 2017 GDP.

Commentary No. 900 (July 19, 2017) reviewed June 2017 New Residential Investment (Housing Starts and Building Permits), and previewed the upcoming annual GDP benchmark revisions and the coincident "advance" estimate of second-quarter 2017 GDP.

Commentary No. 897 (July 6, 2017) reviewed the headline May 2017 Construction Spending and the annual revisions to same, along the May Trade Deficit, and June The Conference Board Help Wanted OnLine® Advertising and the May Cass Freight Index™.

General Commentary No. 894 (June 23, 2017) reviewed unfolding economic, financial and political circumstances in the context of market expectations shifting towards an “unexpected” headline downturn in broad economic activity, along with headline details on May 2017 Real Median Household Income (Sentier Research) and New- and Existing-Home Sales.

Commentary No. 890 (June 5, 2017) covered the negative-downside annual benchmark revisions to the trade deficit, the May 2017 estimates of labor conditions, ShadowStats Ongoing Money Supply M3, The Conference Board Help Wanted OnLine® Advertising and April 2017 estimates of the Cass Freight Index™, and the monthly trade deficit and construction spending.

Special Commentary No. 888 (May 22, 2017) discussed evolving political circumstances that could impact the markets and the economy, reviewed the annual benchmark revisions to Manufacturers’ Shipments and New Orders for Durable Goods and updated Consumer Liquidity Conditions.

Commentary No. 887 (May 18, 2017) reported on the April 2017 detail for Industrial Production and Residential Construction (Housing Starts), with some particular attention to historic, protracted periods of economic non-expansion, of which the current non-recovery is the most severe.

Special Commentary No. 885, entitled *Numbers Games that Statistical Bureaus, Central Banks and Politicians Play*, (May 8, 2017) reviewed the unusual nature of the headline reporting of the April 2017 employment and unemployment details.

Commentary No. 882 (April 27, 2017) summarized the annual benchmark revisions to Retail Sales and reviewed the March 2017 releases of New Orders for Durable Goods and New- and Existing-Home Sales.

Commentary No. 877 (April 2, 2017) outlined the nature of the downside annual benchmark revisions to industrial production, along with implications for pending annual revisions to Retail Sales, Durable Goods Orders and the GDP.

Commentary No. 876 (March 30, 2017) current headline economic activity in the context of formal definitions of the business cycle (no other major series come close to the booming GDP, which is covered in its third revision to fourth-quarter activity). Also the February 2017 SentierResearch reading on real median household income was highlighted.

Commentary No. 875 (March 24, 2017) assessed and clarified formal definitions of the U.S. business cycle, which were expanded upon significantly, subsequently, in *No. 876*. It also provided the standard review of the headline February 2017 New Orders for Durable Goods, New- and Existing-Home Sales and the Cass Freight Index™.

General Commentary No. 867 (February 24, 2017) assessed mixed signals for a second bottoming of the economic collapse into 2009, which otherwise never recovered its level of pre-recession activity. Such was in the context of contracting and faltering industrial production that now rivals the economic collapse in the Great Depression as to duration. Also covered were the prior January 2017 New- and Existing Home Sales.

Commentary No. 864 (February 8, 2017) analyzed January 2017 Employment and Unemployment detail, including benchmark and population revisions, and estimates of December Construction Spending, Household Income, along with the prior update to Consumer Liquidity.

Commentary No. 861 (January 13, 2017) covered the December 2016 nominal Retail Sales, the PPI, with a brief look at some summary GAAP reporting on the U.S. government’s fiscal 2016 operations.

No. 859 Special Commentary (January 8, 2017) reviewed and previewed economic, financial and systemic developments of the year passed and the post-election year ahead.